STEVEN C. MORGAN & CONNOR S. MORGAN

HACKER'S

MOVIE GUIDE

2022–2023 EDITION

THE COMPLETE LIST OF HACKER & CYBERSECURITY MOVIES

FOREWORD BY STEVE WOZNIAK
CO-FOUNDER OF APPLE

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CYBERSECURITY VENTURES

This book is dedicated to the world's hackers.
Without you, I would have nothing to write about.

– Steve Morgan

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– Steve Wozniak

What did I want to be in life? In 6th grade I was accomplished in electronics, both analog and even the non-existent digital fields. I told my dad that I wanted to be an electrical engineer, and secondly a 5th grade teacher. Both of these desires came from my own experiences, but the EE side from early inspiration. My inspiration came from books and TV shows and movies and other young electronic kids. Sci-fi and space adventure stories grabbed my full attention.

In school and most of our homes, we were taught strict rules of behavior that would get us

through life. Why do the rules mean so much to some, but are taken lightly by others, including all of my main friends? Almost every tech leader that I've known speaks about their pranks and deviations from rules as the joy of their youth. Schools and other institutions of life have a lot that fights our natural curiosity and creativity. The first day of kindergarten, my young son wanted to open a drawer, but it wasn't allowed. He had a curiosity but the teacher had 30 students to watch.

Some grow up academically smart with analog and digital skills. They can be assigned a task, by a boss or a company, and complete it. Companies form project teams based on skill sets, not on personality. But some of us are dreamers. We pursue things that are interesting, whether real or not. We become more than engineers. We become inventors. When we get an idea or a question, we often reply "why not?" Ideas for very different new things abound but we inventors want to test the ideas and even create prototypes. We want to run into our laboratories and start building possible solutions. We want to do what our movie heroes do.

When young, we are less wealthy or powerful than most adults. My whole life has been wanting to be like movie protagonists, who are younger, poorer and weaker, having to overcome Goliath,

but having brains that think outside of the rules. I have always been for the young and powerless, the consumers vs. the producers. This is almost always the theme ascribed to hackers in movies. The young hackers use their brains for good and fairness. We all take their sides in these movies. They are the good guys that all of us with brains want to be.

The one time I started writing a movie myself, it was based on young hackers with our home-built satellite dishes (before satellite TV subscriptions) taking control of the government satellite spy network, a'la Enemy Of The State. I was a prankster and some of the best pranks are made better by framing someone else. In my movie, the government's own equipment would be used against them. I was never a movie producer but this was how I thought.

Hacking is a term that has a bad meaning for many. They only see hacking skills being used to disrupt the lives of others. In Steven Levy's book Hackers, he gets into the adoption of this term for computer programmers from a group at MIT. Computers were way too expensive for personal use back then. But members of this MIT Model Railroad Club used at least one MIT computer in the wee morning hours when that computer was otherwise unused. They practiced getting more

and more perfect programs for problem solutions. They "hacked" away on their programming all night long. The benefit was that the world got better minds that shared their learnings with others.

Although I didn't know of this original "hacker" experience, it was the way I thought. Computer skills were not to be used for bad things like theft, but only to develop my own mind. This is the true nature of hacking to me. Today it has to be called White Hat hacking.

My first year of college, Introduction to Computers was a graduate level course but I could take it as a freshman. I got an A+ and I really knew it all, from the structure of computers to programming techniques. This was a great excitement in my life because I could run programs of my own! I wrote 7 programs to print tables of numbers that scientists and engineers used, like powers of 2 and factors and Fibonacci numbers. I wrote my programs on a single card or two, as tightly as could be done. They printed 60 pages each run and I could get 3 runs a day. I was piling up reams of output in my dorm room when they shut me off. I had run our class 5 times over budget. I didn't know we had a budget. I was scared into thinking that I'd be charged something equivalent to $50,000 today. Ouch.

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I had done something worthy of commendation but then was being criticized and punished for it.

My second year of college, back at home, a friend from high school had duplicated the key to the computer room at DeAnza College. We would go in at midnight and Larry would turn the computer equipment on, as he worked there. I would run huge punched card programs through the nights. I was getting smarter and smarter and improving my programming skills. But we got caught and it was treated as a bad thing we were doing, using this computer when it otherwise would have been sitting unused.

The next year I worked programming for a company developing a new computer. I came in one night and was running some fast code I'd written to calculate the number "e" to 38,000 or 138,000 digits (I forget which). The president's son came in but instead of being amused and impressed, he chastised me for not doing company work at night.

We hackers do things out of the ordinary. That's one reason that we wind up in movies. Without the movies most of society would look at what we do as evil only and not judge us by individual cases.

Did this curiosity about what we could do that supposedly was impossible lead to Apple? You bet

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it did. First, it inspired and motivated us, based on stories we'd seen where hackers were the good guys. There are far too many movies going back dozens of decades, to mention specific ones by name here.

Let's go back to 1971. I read an article in a magazine on our kitchen table, a magazine I never read called Esquire. The article was called Secrets of the Blue Box...An Interesting Story. I assumed that Interesting Story meant it as fiction. It developed some amazing personalities who used their knowledge of the phone system to take it over and set up their own networks from pay phones. They were interesting characters like a blind phone phreak named Joe Engressia Jr. and Captain Crunch. They had created a device called the Blue Box that could make free calls anywhere in the world by putting tones into a normal phone.

Halfway through this article I was emotionally taken with these fictional characters so I called Steve Jobs and started reading parts to him. But then I froze. I told Steve that something was wrong. This article included elements that you wouldn't find in a fiction story. The article specified exact tones (frequencies) to make a "1," a "2," and a "3." What fiction article would ever say that a "1" is 700 hertz mixed with 900 hertz? Something was wrong with this article. Steve Jobs and

I wondered if it could be real. But how could we find telephone company documentation to prove that it worked?

Back then I had to get computer manuals to design in my room at home. There were no computer books or magazines in stores back then. So one day I drove to the top physics research place in the world, Stanford Linear Accelerator Center in Palo Alto. I drove in with no security stop and found the main building. I found an unlocked door and then a technical library on the 2nd floor. I would read computer journals and order manuals, just for my design fun. The smartest people in the world don't lock doors, the same as myself.

So Steve Jobs and myself drove to SLAC and started going through books there, hoping to find internal phone company information. In a big blue book called CCITT or something I came across a list. A "1" was 700 hertz and 900 hertz. I froze. The tones (frequencies) for "2" and "3" matched the article but now we had the whole list. Steve and I were shaking in this discovery that what seemed like fiction was real.

Tones were, in that day, created with analog circuits. But after half a day fussing with trying to keep our tones stable, I decided to design a perfect digital solution. Sunnyvale Electronics had a calculator-style keyboard for sale and a plastic

container. Chips in single-quantity cost a fortune. I was always driven not to do a job that was done by others, but to take different approaches to be the best of all. This was the first digital blue box. I was so motivated to do things differently that the inputs to some chips telling them what tones to generate I also used as outputs (of minute amounts of electrons) to be amplified and actually supply power to the chips. I knew that the chips, without full power, were constructed internally in a way that this would work. Thinking like that, and coming up with my own tricks like that, would stick in my mind forever to be used again. But a "hack" is not as important as the ability to come up with new hacks, new tricks, when needed.

Most people wanted a blue box to make free calls but I was a geek with no girl friend to call. I wanted the prestige of showing others something that they would never have suspected existed. I would use my blue box to trick the phone company equipment and operators into things, but when I made long-distance calls, I placed them normally on my dorm phone and paid the phone company fees for it. I only wanted the box to explore a system. I learned that you develop robust systems first and only address security later.

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I taught 5th through 9th graders how to use computers for all the normal class projects, for 8 years. My goal wasn't to bring up computer geeks, just good computer users. I felt that making the subject of computer use FUN was the key. Motivating students in a class is much more important than the content you teach. My approach to teaching involved my own creativity. I wrote every lesson and handout myself. We would eventually learn about networks, even before the internet had come and the students were overjoyed to find ways to download apps, useful and fun, over the AppleTalk network or from AOL. The most exciting day in all my 5th grade classes for 8 years was the day the students actually learned enough to make their own computers show up as servers on the network.

I was teaching how to protect your computer with proper passwords. My students were taught how to protect certain folders (directories) and files and enable certain fronds onto certain parts of their storage. I established a rule that you could hack into someone else's server and change things but you had to be able to easily undo it. Over 8 years they did play with their friends' computers but never once disobeyed the rule about fixing things. They had their fun and ate it too.

I feel that developing creativity is the most important thing to me but it doesn't come from a

method in books. It comes to the individual from fun they have. I took an advanced class one year and played a true hacking game of figuring out a password for a Macintosh. I had my students set up a password on their computer and take some screen snapshots of the memory contents. Then they would change their password and see what changed. What a surprise! We found that MacOS didn't encrypt the passwords but only substitute. An N might substitute for an A, a V might substitute for a B, etc. My class formed a table and, having access to the storage of another computer, they could figure out the password. One student did this on the school computers a couple of times and I'm sure it enhanced his joy in hacking forever.

I never hacked a computer, as in trying to take control of someone else's machine, even to trick them. I have had friends who did such things and I laugh at their stories. I probably never had the time or patience or priority to try to crack passwords.

I only got others' passwords 3 times but each story is funny. Before Apple, I had constructed a terminal that used my TV for output and the cheapest keyboard I could find for input. I could dial a pay-for number in Palo Alto and my modem connected to the ArpaNet when there were only

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6 university computers on it. Now we hove count-less billions on the InterNet. I found out about a Time Share company near my home called Call Computer. I had an account there too. One day, Captain Crunch of blue box fame, who also had a Call Computer account, connected to it typing in my apartment floor. In the early internet days I was a network admin so now whenever someone starts to type a password my head spins the other direction. I respect security and passwords.

But when Crunch got to his Call Computer pass-word, he had his hands over home row only a key higher. He typed click-click-click-click., only 4 letters, without moving his hands and only typing with his left hand. Steve Jobs and I were in Call Computer not long after that and we tried to guess Crunch's password. My second try was WERE and it worked. We saw Crunch's resume in his files. I jokingly suggested that we could enter a couple of arrests in his resume. But it was only a joke. We did nothing harmful.

Another time I got a password was when my stepson Adam had a computer on our network at home. Turns out his password was Adam, which was probably the first one I tried. I moved his folders way out horizontally and vertically so he'd have to scroll and scroll and hopefully find them. But the real prank was to frame someone else. I

went to Adam's mom and showed her that his computer was on the network and told her to try and guess Adam's password. I eventually led her to it and congratulated her and had her create a folder right in the middle of Adam's desktop labelled "From Mom." He was livid towards her at first but I got the credit.

The only other time I got someone's password was when I discovered a server running on my class network, in my office here in Los Gatos, named SENDMEPORN@KILLERJUPE@AOL.COM. I was shocked. We checked every machine and none had that name. But I supplied dial-up access to my office, even pre-internet, for every student, and found that one student was logged in. I guessed the AOL password JUPE for KILLERJUPE and his real name didn't match any of my students. But it was clear that this KILLERJUPE was friends with a student of mine and using his account to connect.

In other words, KILLERJUPE was hacking me. Payback is fair. His computer was wide open and unprotected so I put in extensions like the one that asks if you want to erase your hard disk with only a button for YES when you shut down. On AOL, I kept putting him into child's mode. My friend Auri saw that this KILLERJUPE was trying to get some 14-year-old girl in Santa Barbara to

have sex with him so Auri sent her a note from KILLERJUPE about his coming out. After a week of this we figured that KILLERJUPE would realize what was going on and would change his password so we contacted AOL TOS (Terms Of Service) from his account, but with his father screaming obscenities at AOL TOS about why they couldn't catch a hacker. By this time the gig would be up for us so I put in a line about writing your name (AOL) on a bullet but you'd have to look down the barrel to see if I spelled it right. KILLERJUPE's account was terminated a few minutes later.

I myself seek the unusual in life, not riches or powerful people. I seek the amazing, things that you wouldn't believe exist and that they would make movies about. I seek things that are supposedly impossible. Sometimes, but not always, you can accomplish the impossible if you struggle to find the ways.

My wife and I returned home one evening, after a movie or something. We had 6 puppies in a plastic tub. They were the first litter born in this home. I was out of town when they were born but my wife numbered them with nail polish in old school resistor color codes, where brown is 1, red is 2, etc. The mother would lick off the numbers to where you couldn't read them but the colors still showed. The puppies' eyes were barely open. This

time one of the puppies had tried hard enough to get out of the tub and she was learning to walk, just barely around my network closet. I yelled that little 2 was a hacker and she'd be the smartest dog that way, seeking to learn the world.

That is how I feel about all hackers. They are and have always been my heroes. Everyone who knows me will tell you that. We must share our own hacker stories, or make ones up, to inspire others to think creatively. When I was young I was inspired by real stories too, that would seem like media fiction. My father talked one night about pranks they played at Cal Tech, where he went to school. I didn't let on to my dad that I wanted to do this sort of misbehavior, but inside, in my head, I was now determined to be like that. I hope to inspire many other young people before it's too late for them. Your personality settles between age 18 and 23 (for most) and from then on doesn't change. It's in your youth, particularly in your college years, that you become who you will be for life and what you value.

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ABOUT STEVE WOZNIAK

Co-founder, Apple Computer Inc., Woz U, Efforce

A Silicon Valley icon, technology entrepreneur and philanthropist for more than forty years, Steve Wozniak has helped shape the computing industry with his design of Apple's first line of products the Apple I and II. He also influenced the popular Macintosh. In 1976, Wozniak and Steve Jobs founded Apple Computer Inc. with Wozniak's Apple I personal computer. The following year, he introduced his Apple II personal computer, featuring a central processing unit, a keyboard, color graphics, and a floppy disk drive. The Apple II was integral in launching the personal computer industry. He is listed as the sole inventor on four Apple patents.

In 1981, he went back to UC Berkeley and finished his degree in electrical engineering/computer science. To date, Wozniak has received ten Honorary Doctor of Engineering degrees. Wozniak founded the company Unuson, an abbreviation of "unite us in song," which sponsored US Festivals in 1982 and 1983. Initially intended to celebrate evolving technologies, the festivals ended up as a technology exposition and a rock festival as a combination of music, computers, television, and people.

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For his achievements at Apple, Wozniak was awarded the National Medal of Technology by President Ronald Reagan in 1985, the highest honor bestowed on America's leading innovators. In 2000, he was inducted into the Inventors Hall of Fame and was awarded the prestigious Heinz Award for Technology, The Economy and Employment for single-handedly designing the first personal computer and for then redirecting his lifelong passion for mathematics and electronics toward lighting the fires of excitement for education in grade school students and their teachers.

Through the years, Wozniak has been involved in various business and philanthropic ventures, focusing primarily on computer capabilities in schools and stressing hands-on, experiential learning that encourages creativity and innovation by students. Making significant investments of both his time and resources in education, he adopted the Los Gatos School District, providing students and teachers with hands-on teaching and donations of state-of-the-art technology equipment.

He also founded the Electronic Frontier Foundation, and was the founding sponsor of the Tech Museum, Silicon Valley Ballet and Children's Discovery Museum of San Jose. In 2014, he was

awarded the Hoover Medal, a prestigious honor given for "outstanding extra-career services by engineers to humanity," and was inducted into the IndustryWeek Manufacturing Hall of Fame. In 2015, Wozniak received the Legacy for Children Award from the Children's Discovery Museum of San Jose. The Legacy for Children Award honors individuals whose legacy has significantly benefited the learning and lives of children. The Cal Alumni Association (UC Berkeley's Alumni Association) presented Wozniak with the 2015 Alumnus of the Year Award.

Wozniak is the author of iWoz: From Computer Geek to Cult Icon (Norton Publishing), his New York Times best-selling autobiography. His television appearances include: ABC's Dancing with the Stars, The Big Bang Theory, My Life on the D List, The Late Show with Stephen Colbert, Conan, The Tonight Show Starring Jimmy Fallon and Celebrity Watch Party.

Wozniak continues to pursue his entrepreneurial and philanthropic interests to this day. In October 2017, he co-founded Woz U — a postsecondary education and training platform focused on software engineering and technology development. He has also recently co-founded Efforce — which leverages disparate applications of blockchain technology.

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When Woz and his wife, Janet, are not traveling the world trying to inspire the next generation or building sustainable businesses, they live a happy life in Los Gatos, California with their four Bichon Friese dogs Ziggy, Zelda, Jewel and Wozzie.

PREFACE

The "Hackers Movie Guide" is the most complete list of hacker and cybersecurity movies.

Most of the movies have a central theme around hacking. Others have a certain character or enough footage on the subject matter to be included. These movies can make a boring topic (for some) entertaining. Whatever it takes to get more people interested in combating cybercrime and the cybersecurity field, we're all for it.

My co-author, Connor S. Morgan, dove deep into Hollywood, and then launched himself into cyberspace, in order to produce an unrivaled list of movies.

Amanda Glassner, station manager at WCYB Digital Radio a.k.a. Cybercrime Radio, and staff writer and reporter at Cybercrime Magazine, assisted on the curations.

Dozens of cybersecurity experts and hackers globally threw their support behind us and contributed valuable quotes which can be found alongside the movie listings on every page of the book.

Andrew Patti, executive creative director at Smashbeat Media, designed the front and rear cover of the book.

Steve Wozniak, co-founder of Apple, wrote

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a Foreword that in of itself makes the book worthwhile.

Di Freeze, managing editor at Cybercrime Magazine, and our staff publisher, brought it all together.

-Steve Morgan

INTRODUCTION

Hacker has a double meaning. Encylopedia. com explains:

"During the 1960s, the word 'hacker' grew to prominence describing a person with strong computer skills, an extensive understanding of how computer programs worked, and a driving curiosity about computer systems. Hacking, however, soon became nearly synonymous with illegal activity. While the first incidents of hacking dealt with breaking into phone systems, hackers also began diving into computer systems as technology advanced.

During the late 1990s and into the new millennium, hacking became a popular term for the act of breaking in, tampering with, or maliciously destroying private information contained in computer networks."

The Hacker's Movie Guide lists films with storylines around both types of hackers.

"Most hackers are really white hat hackers and they want to be good," says Steve Wozniak, who was a phone phreak and hacker before co-founding Apple with his friend Steve Jobs.

"For me as a young woman seeing a character of a teenager hacker girl in a movie changed the course of my life," says Keren Elazari, whose TED

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talk about hackers has been viewed by millions, translated to 30 languages, and is one of the most watched talks on TED.com on the topic of cybersecurity.

I believe there is a hacker inside each one of us. Watch a movie and release your inner hacker. It may change your life too.

-Steve Morgan

HACKER'S MANIFESTO

   "The Conscience of a Hacker" was written on Jan. 8, 1986 by Loyd Blankenship under his "handle" or pseudonym "The Mentor," shortly after his arrest, when he was 21 years old. It was originally published in Phrack Magazine. The Washington Examiner called Blankenship's essay "a cornerstone of the hacking culture." Blankenship's manifesto is referenced in the Academy-Award winning 2010 movie, The Social Network, and in the popular 1995 movie, Hackers.

   Another one got caught today, it's all over the papers. "Teenager Arrested in Computer Crime Scandal", "Hacker Arrested after Bank Tampering"...
   Damn kids. They're all alike.

   But did you, in your three-piece psychology and 1950's technobrain, ever take a look behind the eyes of the hacker? Did you ever wonder what made him tick, what forces shaped him, what may have molded him?
   I am a hacker, enter my world...
   Mine is a world that begins with school... I'm smarter than most of the other kids, this crap they teach us bores me...

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Damn underachiever. They're all alike.

I'm in junior high or high school. I've listened to teachers explain for the fifteenth time how to reduce a fraction. I understand it. "No, Ms. Smith, I didn't show my work. I did it in my head..."
Damn kid. Probably copied it. They're all alike.

I made a discovery today. I found a computer. Wait a second, this is cool. It does what I want it to. If it makes a mistake, it's because I screwed it up. Not because it doesn't like me...
Or feels threatened by me...
Or thinks I'm a smart ass...
Or doesn't like teaching and shouldn't be here...
Damn kid. All he does is play games. They're all alike.

And then it happened... a door opened to a world... rushing through the phone line like heroin through an addict's veins, an electronic pulse is sent out, a refuge from the day-to-day incompe-tencies is sought... a board is found.
"This is it... this is where I belong..."
I know everyone here... even if I've never met them, never talked to them, may never hear from

xxx

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them again... I know you all...

Damn kid. Tying up the phone line again. They're all alike...

You bet your ass we're all alike... we've been spoon-fed baby food at school when we hungered for steak... the bits of meat that you did let slip through were pre-chewed and tasteless. We've been dominated by sadists, or ignored by the apathetic. The few that had something to teach found us willing pupils, but those few are like drops of water in the desert.

This is our world now... the world of the electron and the switch, the beauty of the baud. We make use of a service already existing without paying for what could be dirt-cheap if it wasn't run by profiteering gluttons, and you call us criminals. We explore... and you call us criminals. We seek after knowledge... and you call us criminals. We exist without skin color, without nationality, without religious bias... and you call us criminals. You build atomic bombs, you wage wars, you murder, cheat, and lie to us and try to make us believe it's for our own good, yet we're the criminals.

Yes, I am a criminal. My crime is that of curiosity. My crime is that of judging people by what

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they say and think, not what they look like. My crime is that of outsmarting you, something that you will never forgive me for.

I am a hacker, and this is my manifesto. You may stop this individual, but you can't stop us all... after all, we're all alike.

"Conscience of a Hacker" copyright 1986 by Loyd Blankenship (mentor@blankenship.com). Used with permission."

*"I almost don't want to admit it, but my favorite hacker movie is **Swordfish**. The scene where Stanley has to break into a system while being both threatened and distracted happens all the time in the real world."*

- Bruce Schneier is an Internationally Renowned Security Technologist, called a "Security Guru" by The Economist.

HACKER'S MOVIE GUIDE

1956 — 1984 — In a dystopian world, society is closely monitored by Big Brother, an omnipotent force for government surveillance. One man breaks the rules by falling in love and must pay a heavy price. Based on the novel by George Orwell.

1965 — Alphaville — A secret agent goes to the futuristic city of Alphaville to find a missing person and eventually stop the ruling dictator, Professor von Braun, and his sentient computer system, Alpha 60.

1968 — 2001: A Space Odyssey — A group of astronauts is sent on a mysterious mission alongside the AI supercomputer H.A.L. 9000. What follows is an intense battle between man and machine, resulting in a mystifying journey through space and time.

1968 — Hot Millions — Peter Ustinov plays an embezzler who bypasses a mainframe computer's security system to pay invoices from his fictitious companies.

1969 — The Computer Wore Tennis Shoes — Dexter Reilly (Kurt Russell) fixes a computer during an electrical storm and gets shocked. The computer's brain has fused with his, and he's a genius.

*"**iRobot** with Will Smith is one of the few futuristic movies asking us to ask ourselves if our algorithms will make the right choices. Plus, the parts where everyone is amazed that Will Smith will do manual driving in his autonomous car are priceless. No one can believe he would take the risk of actual driving."*

- Roger Grimes, Computer Industry Expert, Author and Columnist

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1969 — The Italian Job — A robber (Michael Caine) recently released from prison gets help from a group of Britain's most infamous computer hackers to steal gold bullion from underneath the noses of the Italian police and mafia. One of the film's most famous scenes is a massive traffic jam caused by hacking the city's traffic control computer.

1970 — Colossus: The Forbin Project — Massive computer systems from the U.S. — "Colossus" — and Russia — "Guardian" — connect to each other. Nuclear war is threatened.

1971 — Paper Man — Five bored college students take advantage of a computer glitch and create a fictitious person, but the prank backfires.

1973 — Westworld — For one thousand dollars a day, guests of a futuristic theme park can visit recreations of different time periods and experience their wildest fantasies with lifelike androids. Pals Blane (James Brolin) and Martin (Richard Benjamin) have chosen to visit Westworld and walk the lawless streets of the American frontier. Their fantasies turn to terror, however, when a duel with a robotic gunslinger (Yul Brynner) goes terribly wrong.

*"The movie **Hackers** (1995) is the reason I am who I am today. Seeing the young Angelina Jolie as the fierce high school hacker Acid Burn, alongside with her diverse crew of subversive hacker heroes, really captured my imagination. It was the first time I saw kids on screen who were geeking out about the same things as I was — and they were the coolest, they had this incredible fashion, music and lifestyle that I completely resonated with."*

*- **Keren Elazari, Hacker, Researcher, TED Speaker, Founder of Leading Cyber Ladies & BSidesTLV***

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1974 — The Conversation — Gene Hackman plays a surveillance expert using high-tech equipment (back in the day) to spy on a couple he fears may be in danger. Nominated for three Oscars.

1975 — Three Days of the Condor — CIA codebreaker Robert Redford tries to figure out why his own agency wants him dead.

1982 — Tron — A computer engineer learns an executive at his company has been stealing his work and is launched into the world of virtual reality.

1983 — Brainstorm — Researchers Michael Brace (Christopher Walken) and Lillian Reynolds (Louise Fletcher) develop a system that allows the recording and playback of a person's thoughts onto videotape. The project spins out of control when the technology is used to explore intense sexual and near-death experiences.

1983 — Superman III — Richard Pryor plays Gus Gorman, a hacker who is caught skimming from his company's payroll through a program he developed and is then blackmailed to help turn Superman evil.

*"**Westworld** (the TV series, which is based on the 1973 film Westworld written and directed by Michael Crichton) is great storytelling, and explores vital issues, but I'm impressed that it has actual, serious theory as to how sentience and self-awareness can emerge."*

- Craig Newmark, Founder of craigslist

HACKER'S MOVIE GUIDE

1983 — WarGames — A high school student (Matthew Broderick) hacks into a military supercomputer in this classic and activates the U.S. nuclear arsenal, at a time when most people didn't know what hacking was.

1984 — Cloak and Dagger — When 11-year-old Davey sees the murder of an FBI agent, the dying man hands him an Atari video game cartridge with military secrets. With Dabney Coleman.

1984 — Electric Dreams — Set in San Francisco, this science fiction romantic comedy is about a love triangle between an architect, a cellist, and a personal computer.

1984 — Hide and Seek — A young computer enthusiast develops a kind of artificial intelligence program named "Gregory P1." To ensure its survival, the computer contacts other computers and begins to fight the humans. It also hooks into the mainframe computer of a nuclear power plant.

1985 — Brazil — When Sam Lowry (Jonathan Pryce) gets involved in a case of mistaken identity, he's labeled as an enemy of the state by the powerful, technology-dependent bureaucracy controlling his society. On a quest to rectify the wrong, Sam meets the woman of his dreams, but she may be a terrorist.

*"When **WarGames** was released into theaters, I was blown away. It wasn't just the action and intrigue of the story that fascinated me but also the idea that a kid with a computer could truly make a difference in the world. I mostly played video games on my computer but after **WarGames**, I began exploring BBS (Bulletin Board Systems) using my trusty acoustic 110 baud modem (same as the one that Matthew Broderick's character used) to log into networks all over the world and communicate with like-minded kids and adults. I spent many years immersing myself in hacker culture, which is why I was so thrilled to meet and interview David Scott Lewis, the man who inspired the main character in **WarGames**, years later for my podcast."*

- Scott Schober, Author of "Hacked Again" and "Cybersecurity Is Everybody's Business"

HACKER'S MOVIE GUIDE

**1985 — Hackers: Wizards of the Electronic Age — ** This documentary about the hacker community includes footage of interviews with some of the programmers that created the PC revolution, including Steve Wozniak, co-founder of Apple. Filmed at a hacker conference held in Sausalito, Calif.

**1985 — Prime Risk — ** Computer-savvy lovers scam Automated Teller Machines and plot to sink the Federal Reserve.

**1985 — Weird Science — ** Teenagers Gary and Wyatt design their ideal woman on a computer, and a freak electrical accident brings her to life in the form of the lovely, superhuman Lisa.

**1986 — Ferris Bueller's Day Off — ** A high school student (Matthew Broderick) who wants the day off breaks into his school's computer system and changes grades and attendance records.

**1987 — Bellman and True — ** A group of bank robbers bribe Hiller (Bernard Hill) , a computer expert, into stealing confidential computer information. He gets the job done but makes the mistake of thinking he's seen the last of the criminals; little does he know they've tracked him and his son to London.

*"Sans Tom Cruise and the Pre-cogs, **Minority Report** offers informative insights into the future of law enforcement and governance. As AI-based predictive algorithms grow more precise in predicting an individual's next action, we will begin heading off crime 'before the fact' in the same way we quash probable terrorist attacks today. After all, we can already predict a person is going to trip and fall within the next 3 weeks with almost 90 percent accuracy, and by doing so, take measures to alter what was previously inevitable."*

- Rebecca D. Costa, Futurist and Author

HACKER'S MOVIE GUIDE

1987 — Terminal Entry — Picking up where WarGames left off, this film tells the story of a group of high school students who unknowingly hack into the network of a dangerous terrorist organization under the impression they're simply playing a game — but the acts of terror caused by their actions are no joke.

1988 — Defense Play — After her father is mysteriously killed while working on a project for the U.S. Air Force, Karen (Susan Ursitti) joins forces with Scott (David Oliver), and the two computer-savvy students open their own investigation into the murder.

1990 — Demolition Man — In 2032 in San Angeles, a utopian city created by the citizens of Southern California, a violent criminal breaks out and threatens the societal peace. John Spartan (Sylvester Stallone), cryogenically frozen for 36 years, is awoken to capture the fugitive, but he becomes distracted when forced to adapt to the future society made up of voice-controlled devices, autonomous connected cars, and more.

*"**WarGames** and **Sneakers** are my two favorites by far. If I had to say anything at all, it would be SETEC ASTRONOMY!"*

- Joe Grand, Product Designer, Hardware Hacker, and Founder of Grand Idea Studio, Inc. Also known as "Kingpin," Joe was a member of the legendary hacker group L0pht Heavy Industries, where he helped raise awareness of the hacker ethos and the importance of independent security vulnerability research.

HACKER'S MOVIE GUIDE

1990 — The KGB, The Computer and Me — In 1986, Clifford Stoll began work on a computer system at the Lawrence Berkeley Laboratory. Two accounting programs were responsible for charging people for machine use. When Stoll discovered a 75-cent discrepancy in the programs, he investigated and uncovered an undocumented user named "Hunter." He soon realized that Hunter had hacked into the system and installed new programs. His investigation led him and U.S. intelligence to the realization that Hunter worked for the KGB.

1991 — Terminator 2: Judgment Day — A cyborg protects Sarah Connor's teenage son John from another cyborg intent on killing him.

1992 — The Lawnmower Man — Resembling "Frankenstein," this science fiction horror film tells the story of a scientist (Pierce Brosnan) and his experiment: a once-simple man (Jeff Fahey) who, through the power of mind-enhancing medication and computer-simulated training sessions, becomes a genius. But it isn't long before this experiment spirals out of control.

1992 — Single White Female — A woman (played by Bridget Fonda) advertises for a roommate. She soon discovers that her new roommate is a hacker (Jennifer Jason Leigh) intent on stealing her identity.

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*"'There's a war out there, old friend. A world war. And it's not about who's got the most bullets. It's about who controls the information. What we see and hear, how we work, what we think... it's all about the information!' -**Sneakers**, 1992. The movie **Sneakers** managed to capture the zeitgeist of the coming information age and associated information age conflict in a very prescient way 30 years ago. As we've seen manifested over the past decade, those with control over information operate with great power, not only in the geopolitical environment, but in financial markets, and within the underlying confines of culture. It is all about the information."*

- Matt Devost, Longtime Hacker, Technologist, Entrepreneur, and International Security Expert, Security Vulnerability Research

HACKER'S MOVIE GUIDE

1992 — Sneakers — A Hacker (Robert Redford) leads a team of experts who test the security of San Francisco companies. They discover a black box that can crack any encryption, posing a huge threat if it lands in the wrong hands ... including rogue NSA agents.

1993 — Frauds — An insurance investigator (Phil Collins) uses games and gimmicks to manipulate the lives of others, including a couple who make an unusual insurance claim. He approves the claim but makes bizarre demands as ransom.

1993 — Ghost in the Machine — A computer-powered MRI machine extracts a serial murderer's soul, and becomes a deadly technological weapon.

1993 — Jurassic Park — Seinfeld's nemesis "Newman" (Dennis Nery) plays an IT guy who hacks his way into a coup that involves him stealing dinosaur DNA to sell to the highest bidder.

1994 — Disclosure — Starring Demi Moore and Michael Douglas, this thriller balances both the virtual and physical worlds, telling the story of a senior executive at a technology company who's on track for a big promotion — that is, until his fate falls into the hands of his ex-girlfriend, who is determined to revive their relationship ... with or without consent.

*"**Sneaker**s had a long-lasting impact on me, which included many elements of cybersecurity, from social engineering, physical security, reverse engineering, decryption, hacking, through to even breaking of cryptographic algorithms and more. It was a visionary movie in 1992 before the days of the Internet, yet already was touching on critical issues such as the risks to society when data becomes king in the digital world where there are 'Too Many Secrets'; are we all safe from persistent hackers?"*

- Jason Lau, Chief Information Security Officer at Crypto.com

HACKER'S MOVIE GUIDE

1995 — Ghost in the Shell — In this animated Japanese sci-fi epic, a cyborg policewoman and her partner hunt a cybercriminal called the Puppet Master, who hacks into the brains of cyborgs to get information and use it to commit crimes.

1995 — GoldenEye — James Bond tries to stop a Russian crime syndicate from using a stolen space-based weapons program and falls into the clutches of an evil genius who plans to rule Earth from cyberspace.

1995 — Hackers — A teenage hacker is back on the scene seven years after being banned from computers for writing a virus that caused the biggest stock exchange crash in history. He and his friends must prove that a superhacker is framing them for a plot to embezzle funds from a large oil company with a computer worm. With Jonny Lee Miller and Angelina Jolie.

1995 — Johnny Mnemonic — A computer chip implanted in his brain allows a human data trafficker (Keanu Reeves) to securely store and transport data too sensitive for regular computer networks. When he gets a valuable package that exceeds the chip's storage capacity, the mnemonic courier must deliver the data within 24 hours or die. Assassins are intent on helping him do just that.

*"I have three favorites: **WarGames** (1983), **Sneakers** (1992) and **Hackers** (1995). Prescient movies. Top actresses and actors. Wonderful entertainment! **WarGames** because it was so early and so prescient. **Sneakers** because that's the business model of HackerOne. **Hackers** because in Angelina Jolie it provided a wonderful role model for girls and women interested in cybersecurity and ethical hacking."*

- Marten Mickos, CEO at HackerOne

HACKER'S MOVIE GUIDE

1995 — Judge Dredd — Judge Dredd (Sylvester Stallone) is sent to a penal colony for a murder he didn't commit. On his way there, he gets an unexpected sidekick when he reunites with Herman "Fergee" Ferguson (Rob Schneider), a hacker he previously busted for destruction of property.

1995 — The Net — A computer programmer (Sandra Bullock) who lives a reclusive life is looking forward to time off when she becomes aware of a conspiracy. Her vacation turns into a nightmare when someone tries to kill her and her identity is stolen. She must prove who she is while trying to figure out why someone wants her dead.

1995 — Under Siege 2: Dark Territory — Steven Seagal returns as ex-Navy SEAL Casey Ryback in this sequel to Under Siege, which finds Ryback and his niece Sarah (Katherine Heigl) on a train headed from Denver to Los Angeles. When the train is hijacked by a psychotic computer genius and his fellow terrorist, who need it for their plot to take control of a top-secret satellite, Ryback enlists the help of a train porter (Morris Chestnut) to foil their plan.

*"A quote from **The Matrix** (1999), my favorite: 'I'm trying to free your mind, Neo. But I can only show you the door. You're the one that has to walk through it.' Reason: Much of hacking has to do with thinking creatively; this quote illustrates this concept because a lot of times you need to stop thinking in a pre-conditioned way. And even if someone teaches you something, you still have to do it on your own."*

- Simon Loizidez, Security Practitioner, OWASP Foundation, Cyprus Chapter Leader

HACKER'S MOVIE GUIDE

1996 — Independence Day — In an epic fight against an alien race, computer expert David Levinson (Jeff Goldblum) achieves a crucial win when he hacks into the fleet of spaceships coming toward Earth, infecting them with a virus and putting a stop to the looming alien invasion.

1996 — Lawnmower Man 2: Beyond Cyberspace — On a mission for world domination, Jobe (Matt Frewer), a virtual reality-based consciousness, is determined to hack into all the world's computers, but his plans are thwarted by Peter (Austin O'Brien) and Benjamin (Patrick Bergin), whose unfaltering passion to save the world — and cyberspace — inspires an all-out war.

1997 — Masterminds — The new security chief at a prestigious private school plans to even a score by kidnapping several of the wealthy students and holding them for ransom. A teenage computer hacker, expelled from the school for pulling pranks, thwarts his plans.

1998 — 23 — After an orphan invests some of his inheritance in a home computer, he begins discussing conspiracy theories inspired by a novel on bulletin boards. He's soon hacking military and government computers with a friend. Based on a true story.

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*"I love the Line "Sorry, Dave, I can't do that" from HAL in **2001: A Space Odyssey**. What I believe we can learn from the film is the importance of responsible AI (artificial intelligence) and cybersecurity. We, not machines, are the ultimate experience creators."*

- Sylvia Acevedo, Rocket Scientist, Fortune 500 Board Member, Author, Former CEO at Girl Scouts of the USA

HACKER'S MOVIE GUIDE

1998 — Enemy of the State — A lawyer (Will Smith) isn't aware that a videotape in his possession proves a congressman was murdered for opposing surveillance legislation. When he becomes the target of a corrupt NSA official and his life begins to fall apart, he enlists the help of an ex-intelligence operative (Gene Hackman).

1998 — Mercury Rising (Code Mercury) — A renegade FBI agent (Bruce Willis) must protect a 9-year-old autistic boy who has cracked encrypted government code that was supposed to be unbreakable.

1998 — Pi — Is there a mathematical key that can unlock the universal patterns in nature? If found, can that key predict anything — even the stock market? A brilliant, obsessed, and paranoid mathematician who barricades himself in a room filled with computer equipment intends to find that key, but might go mad while doing so.

1998 — Webmaster — In this Danish sci-fi thriller, a powerful crime leader hires a hacker to monitor the security of his computer operations. When someone else hacks into the database, the webmaster must go to extremes to find him, or die within 35 hours.

*"**Sneakers**, which came out a few years before the movie **Hackers**, left a powerful impression on me. I saw a group of people who knew how to spot and exploit security loopholes and vulnerabilities, and they each had their different talents. **Sneakers** introduced me to the fundamental concept of 'red team testing,' that people could be hired to emulate an actual attacker in order to strengthen the security of an organization — and I loved it."*

*- **Keren Elazari, Hacker, Researcher, TED Speaker, Founder of Leading Cyber Ladies & BSidesTLV***

HACKER'S MOVIE GUIDE

1999 — Entrapment — An undercover art investigator (Catherine Zeta-Jones) is intent on tracking down and capturing a renowned thief (Sean Connery). They end up attempting a heist together.

1999 — eXistenZ — Computer programmer Allegra Geller's (Jennifer Jason Leigh) latest creation, the hyper-realistic virtual reality game eXistenZ, takes a dangerous turn when a crazed assassin becomes intent on destroying it. With help from Ted Pikul (Jude Law), Allegra sets out to save the game, and her life.

1999 — The Matrix — In a dystopian future, humanity is unknowingly trapped inside the Matrix, a simulated reality created by intelligent machines to distract humans while they use their bodies as an energy source. A computer programmer / hacker known as Neo (Keanu Reeves) discovers the truth and joins forces with other rebels to free humankind.

1999 — Office Space — They're supposed to be part of one big happy family, but three computer programmers hate their jobs and their boss. They concoct a scheme to embezzle small amounts of money from the high-tech company that employs them, but a mistake results in a bigger theft than planned. With Jennifer Anniston.

*"This is an awesome guide ... and contains, happily, one of my all-time favorite hacker movies, **Ferris Bueller's Day Off**, which has the life-defining line: 'Life moves pretty fast. If you don't stop and look around once in a while, you could miss it.'"*

- Jen Easterly, Director of the Cybersecurity and Infrastructure Security Agency (CISA)

HACKER'S MOVIE GUIDE

1999 — NetForce — In the year 2005, NetForce, a division of the FBI, is tasked with protecting the Net from terrorism. A loophole in a browser allows someone to gain control of the internet and all the information it holds. Now the commander of NetForce must stop him, as he also tracks down a killer.

1999 — Pirates of Silicon Valley — This biographical drama about the development of the personal computer and the rivalry between Apple Computer and Microsoft spans the years 1971 – 1997. Noah Wyle portrays Steve Jobs and Anthony Michael Hall stars as Bill Gates.

1999 — The Thirteenth Floor — This science-fiction neo-noir film begins in 1999 in Los Angeles when the inventor of a newly completed virtual reality simulation of the city in 1937 is murdered. A computer scientist he has mentored (played by Craig Bierko) becomes the primary suspect and begins to doubt his own innocence because of the evidence against him. He eventually enters the simulation to unravel the truth and realizes nothing is as it seems.

*"**Identity Thief** is my favorite. Though a comedy, it really shows how easy it is to steal an identity and how difficult it is to recover from it. Still very applicable and should put everyone on notice."*

- Alissa (Dr Jay) Abdullah, PhD, Deputy Chief Security Officer & SVP of Emerging Corporate Security Solutions at Mastercard

HACKER'S MOVIE GUIDE

2000 — Charlie's Angels — Working for the reclusive millionaire Charlie (John Forsythe), Angels Natalie (Cameron Diaz), Dylan (Drew Barrymore) and Alex (Lucy Liu) take on the case of a young high-tech genius (Sam Rockwell) who has been kidnapped. Part of the action involves employing a variety of disguises and technological tricks to enter a master computer's massively protected mainframe.

2000 — Hackers in Wonderland — This documentary on hackers in the United Kingdom and in the United States includes interviews with prominent hackers who reveal what drives them. The hackers include ColdFire, Phobos, and cyberjunkie.

2000 — Takedown — Also known as "Track Down," the controversial movie version of the manhunt for legendary hacker Kevin Mitnick is based on the book by Tsutomu Shimomura, "Takedown: The Pursuit and Capture of Kevin Mitnick, America's Most Wanted Computer Outlaw – By The Man Who Did It."

2001 — Antitrust — When a college graduate (Ryan Phillippe) gets a job writing software at a multi-billion dollar computer company, he has no idea that the founder (Tim Robbins) and new mentor is hiding dark secrets. Is there anyone he can trust?

"I can't keep track of the number of movies who have taken (ripped off) ideas and characters from my origin story of phreaks and hackers, 'Secrets of the Little Blue Box.' (Esquire Oct. '71). But the one I think captured the spirit of it best was one of the very first, **WarGames***.*

- Ron Rosenbaum, Author and Journalist

HACKER'S MOVIE GUIDE

2001 — The Code — This documentary covers the first decade of GNU/Linux and features some of the most influential people of the free software (FOSS) movement.

2001 — Freedom Downtime — This documentary covers the plight of convicted computer hacker Kevin Mitnick, from the standpoint that Miramax misrepresented him in the film "Takedown." It includes the story of several computer enthusiasts who confront Miramax reps about their discontent with aspects of the script, including the film's ending.

2001 — Revolution OS — The history of GNU, Linux, and the open source and free software movements is traced in this documentary. It features several interviews with prominent hackers and entrepreneurs.

2001 — The Score — An aging safecracker (Robert De Niro) plans to retire, but his fence (Marlon Brando) talks him into one final score, stealing one of Canada's natural treasures hidden in the basement of a Customs House. He joins forces with another thief (Edward Norton) who hires someone to hack into the Custom House's security system, but things go wrong.

*"What an amazing list! My favorite quote is simply 'Ramsey?' from **Fast and Furious 7**. The team is about to rescue the hacker Ramsey from a different group. As Brian O'Connor pulls the bag off that has been covering her head, we see it's a girl. I remember being surprised, and so pleased, to see a female hacker in a film that it stuck with me and gave me hope for the direction of our industry."*

- Karla Reffold, Cybersecurity Industry Recruiter and Speaker

HACKER'S MOVIE GUIDE

2001 — Secret History of Hacking — The focus of this documentary is phreaking, computer hacking, and social engineering occurring from the 1970s through the 1990s. John Draper, Steve Wozniak, and Kevin Mitnick are prominently featured.

2001 — Swordfish — A spy named Gabriel (John Travolta) plots to steal a large fortune. He enlists Ginger (Halle Berry) to persuade Stanley (Hugh Jackman), who spent two years in prison for hacking an FBI program, to help. But what is Gabriel really up to, and who or what is really behind the plot?

2002 — Catch Me if You Can — Frank Abagnale is one of the world's most respected authorities on forgery, embezzlement, and secure documents. His riveting story provided the inspiration for Steven Spielberg's film starring Leonardo DiCaprio as Abagnale and Tom Hanks as the FBI agent fast on his heels.

2002 — Cypher — Morgan Sullivan (Jeremy Northam) is an accountant turned corporate spy working for a global computer corporation. When a mysterious woman suggests his job isn't what it seems, Morgan ascends into a complicated world of brainwashing, where he struggles to maintain his true identity.

*"**Ferris Bueller's Day Off**: 'I wanted a car. I got a computer. How's that for being born under a bad sign?' As a kid in the 80s, this had me convinced that my school was equally open to having records changed. Only thing that was missing from the scene was a modem screech, and it would have been perfect."*

- Matt Hayden, Former Assistant Secretary of Homeland Security for Cyber, Infrastructure, Risk, and Resilience at the U.S. Department of Homeland Security

HACKER'S MOVIE GUIDE

2002 — Half the Rent — This film follows a computer hacker who, after the death of his girlfriend, breaks into and camps out at other people's apartments when they're not home. But when what started as a temporary solution to homelessness becomes a dangerous obsession, will the risk outweigh the reward?

2002 — Minority Report — It's 2054 and a specialized Pre-Crime police department in D.C. stops crimes before they are committed based on information from Pre-Cogs, three psychic beings who channel their visions into a computer. When they accuse the unit chief (Tom Cruise) of a future murder, he becomes a fugitive, hunted by his own department.

2002 — Storm Watch — A champion player of virtual reality games must suddenly race against time to stop a criminal mastermind who has stolen his identify from destroying the world with a weather satellite. Also known as "Code Hunter."

2002 — Terminal Error — A former employee of a major software company gets even with the president by planting a computer virus on an MP3 and giving it to his son. His plan is to crash the computer terminals, but the virus has a mind of its own and begins to take out large portions of the city. Father and son must create their own virus to stop the chaos.

*"'The past is just a story we tell ourselves' (from the movie **Her**, 2013). This is true in reality as the past is the memory of self-satisfaction when we have more time. We don't recollect anything when we are busy."*

- Madhu Vadlamani, Artificial Intelligence Practitioner

HACKER'S MOVIE GUIDE

2003 — Code 46 — In a dystopian world, citizens are forbidden to travel outside their cities without special permits from the totalitarian government. When forged permits start to circulate, William Gold (Tim Robbins) is tasked with investigating, finding, and taking down the individual responsible, though he never expects to fall in love with her.

2003 — The Core — After several bizarre incidents across the globe, a geophysicist and scientists determine that the planet's molten core has stopped rotating and that the magnetic field will collapse within a year. They devise a plan to bore down to the core and set off nuclear explosions to restart the rotation and enlist a hacker to scour the internet and eliminate all traces of the pending disaster to prevent worldwide panic.

2003 — Foolproof — Kevin (Ryan Reynolds) is part of a friend group with an odd hobby: they plan heists, yet never carry them out despite being perfectly able to do so. But when their plans fall into the wrong hands, the friends are thrust into the criminal world as they're forced to carry out a jewelry warehouse heist that was never supposed to see the light of day.

*"Movies that feature ethical hackers fighting back against evil and wrong-doers can engage, entertain, and recruit tomorrow's talent. These movies are vital to our recruiting efforts. The movie that convinced me that computers would be a major part of my future? **WarGames**. It came out right around the time that President Reagan called the Soviet Union an 'evil empire.' We all worried what the Cold War could bring next. Matthew Broderick played high schooler David Lightman, who is using his skills to play a computer game before it's released and ends up infiltrating a facility. I don't want to spoil it for those who have not seen it. Get your popcorn, kick up your feet, and see the movie that inspired me to continue with my high school programming classes!"*

- Theresa Payton, Former White House CIO, Author, Actress on the CBS TV Show "Hunted"

HACKER'S MOVIE GUIDE

2003 — In the Realm of the Hackers — This documentary reveals how and why two Australian teenager computer hackers, Electron and Phoenix, stole a restructured computer security list in the late 1980s and used it to break into some of the world's most classified and secure computer systems.

2003 — The Italian Job — After a thief (Edward Norton) turns on his partners and gets away with the gold they've stolen in a heist, his former team seeks revenge.

2003 — The Matrix Reloaded — With the help of Neo (Keanu Reeves), Morpheus (Laurence Fishburne), Trinity (Carrie-Anne Moss), and other freedom fighters, more and more humans have been freed from the Matrix and brought to Zion. But 250,000 machines are digging towards the stronghold and will reach them in 72 hours, so they must prepare for war.

*"'When you give people freedom, you don't know what they'll do with it.' - **Silk Road** (2021) Today we have cyber freedom, we can choose to be educated and safe or uneducated and reckless when it comes to securing ourselves. We're seeing the censorship of our information over the internet and social media, which is preventing our ability to be safe and by being able to view information from both points of view."*

- Connor Morgan, Co-Author of "Hackers Movie Guide" 2022 Edition

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2003 — Paycheck — Michael Jennings (Ben Affleck) makes good money working on top-secret projects and then agreeing to have his memory erased, until a payment of $92 million for a three-year assignment is canceled. With his life in danger, he must get help from a scientist (Uma Thurman) he doesn't remember dating to figure out the importance of seemingly random items.

2004 — One Point O — Simon (Jeremy Sisto), a young, paranoid computer programmer, finds himself on the receiving end of a series of mysteriously empty packages. Little does he know these deliveries are only the tip of a reality-bending iceberg that will change his life forever.

2004 — Paranoia 1.0 — A computer programmer receives mysterious empty packages inside his apartment and tries to find out who's sending them, why, and who he can trust. Also known as "One Point O."

2005 — V for Vendetta — In a dystopian future, a tyrannical British government imposes a strict curfew following the outbreak of a virus. An anarchist in a smiling Guy Fawkes mask seeks revenge with the help of a young woman and hacks into the television network to urge others to revolt against tyranny.

*"The original **Italian Job** (1969), starring Michael Caine, was a childhood favorite. Watching the comedic caper of a bunch of bumbling thieves going up against the Italian Mafia to steal a shipment of gold bullion from an armoured car by shutting down the traffic in the Italian city of Turin, escaping off-road with the loot in three (red, which and blue) Mini Coopers, and then driving them into a tour bus was a classic! To create the necessary traffic jam, they enlist a mad computer scientist (played by the anachronistically bonkers and wholly inappropriate Benny Hill) to write new code on magnetic tapes, and swap them into the master control computer to simultaneously turn every light in the city red and cause car chaos! SPOILER ALERT: The movie ends with the back of the escape bus dangling over a cliff in the Alps. As the gold slips towards the open back of the bus, the final scene ends with Michael Caine's famous line, 'Hang on a minute lads, I've got a great idea.'"*

- Mark Sangster, Principal Evangelist & VP Industry Strategies at eSentire

HACKER'S MOVIE GUIDE

2006 — Deja Vu — Doug Carlin (Denzel Washington) is an ATF agent working to capture the terrorist responsible for a ferry bombing that killed hundreds. Using an advanced form of surveillance technology, Doug travels back in time, on a mission to prevent the crime, but his newfound obsession with one of the victims puts everything at risk.

2006 — The Departed — Boston police officer Billy (Leonardo DiCaprio) goes undercover to infiltrate — and take down — the dangerous Irish gang tearing up his city, led by Frank Costello (Jack Nicholson). Becoming consumed by his secret life, Billy loses sight of his mission, though everything comes back into perspective when a career criminal infiltrates and begins threatening the police department.

2006 — Firewall — When his family is taken hostage, a security specialist (Harrison Ford) who designs theft-proof computer systems for financial institutions must break into his own system and steal millions of dollars to pay off their ransom.

*"Uhm mm … tough choice to pick as there are good hacker movies out there. If I were to pick a favorite one, I would have to go with 1992, the **Sneakers** movie. This quote from the movie just sums it all for me because this is our current state with all the digital transformation of today's world: 'The world isn't run by weapons anymore, or energy, or money. It's run by little ones and zeroes, little bits of data. It's all just electrons.'"*

- Noureen Njoroge, Director of Global Threat Intelligence at Nike

HACKER'S MOVIE GUIDE

2006 — Hacking Democracy — This documentary investigates allegations of election fraud during the 2004 U.S. presidential election. It follows Bev Harris, the founder of Black Box Voting, a nonprofit consumer-protection group, and other citizen activists who set out to uncover flaws in the voting system.

2006 — In Ascolto — Also known as The Listening, this film takes inspiration from the mass surveillance operations of the National Security Agency (NSA), chronicling the experience of a spy (Michael Parks) working undercover to get on the inside of a counter-listening station in the Italian Alps.

2006 — Man of the Year — A satirical political talk show host (Robin Williams) runs for president and gets elected with the help of fans who begin a grass-roots campaign. It's later revealed that his presidency was the result of a computerized voting machine malfunction.

2006 — The Net 2.0 — A young computer systems analyst arrives in Istanbul to start a new job, but finds out her identity has been stolen. She must catch who did it to get her life back.

*"**WarGames** - 'I don't believe that any system is totally secure.' This is what drives the cybersecurity research and one of the prime reasons of pursuing this field."*

- Sajal Bhatia, PhD, Assistant Professor (Cybersecurity) and Director of Cybersecurity Programs at Sacred Heart University

HACKER'S MOVIE GUIDE

2006 — Pulse — In this remake of a Japanese horror film, a student is shocked when her boyfriend, a computer hacker, commits suicide. Then she and her friends receive online messages from him, asking for help. Another computer hacker must help her stop a supernatural plague traveling through the network.

2006 — A Scanner Darkly — This computer-animated adaptation of Philip K Dick's 1977 sci-fi novel is set in the near-future. The U.S.'s war on drugs, particularly a hyperaddictive substance called D (for Death), prompts the enforcement of a police state that uses numberless surveillance scanners.

2007 — Bourne Ultimatum — Operative Jason Bourne (Matt Damon) teams up with an investigative reporter to find the people who betrayed him, while a ruthless CIA official and his team continue to track him down in the hopes of assassinating him before he gets his memory back.

2007 — Breach — This docudrama is based on the events leading up to the capture of FBI Agent Robert Hanssen, convicted of selling secrets to the Soviet Union. A low-level surveillance expert gets promoted and assigned to work with Hanssen, unaware that he is to find proof that he is a traitor.

*"'Don't fight it son. Confess quickly! If you hold out too long you could jeopardize your credit rating.' **Brazil**, 1985. Clearly Terry Gilliam as a member of Monty Python has a firm grasp of the absurd but it is grounded in something rather too close to our reality in this movie. Case in point for my chosen quote is China and their current social credit system."*

- Darren Hodder, Founder at Lockdown Risk

HACKER'S MOVIE GUIDE

2007 — Every Step You Take — This documentary is an in-depth look at modern-day Britain and its Orwell-esque levels of government surveillance. It explores the pros and cons of CCTV, highlighted by commentary from notable experts in the field.

2007 — Live Free or Die Hard — As the nation prepares to celebrate Independence Day, a disgruntled government security agent launches an attack on America's computer infrastructure. Veteran cop John McClane (Bruce Willis) and a young hacker must help the FBI's cyber division take him down.

2008 — 21 — Six Massachusetts Institute of Technology (MIT) students hack their way to success — and millions of dollars — in Las Vegas casinos by counting cards until casino enforcer Cole Williams (Laurence Fishburne) thwarts their plans. Based on a true story.

2008 — Download: The True Story of the Internet — Told through personal accounts from the founders of Yahoo, eBay, Google, Amazon, and many others, this documentary tells the story of how the internet became what it is today.

*"I'd say my favorite hacker movie is **The Conversation**. The technology is laughably out of date now but that's the point; technology will always be out of date at some point. The timeless value of the movie is that it explores the human element of how people use technology to intervene in the lives of others. Whether for good or bad reasons, there's always a cost to the users and targets of that technology."*

- Mark Elliott, Cybersecurity Entrepreneur & Former CIA Operations Officer

HACKER'S MOVIE GUIDE

2008 — Eagle Eye — Two strangers, Jerry and Rachel, come together after receiving mysterious calls from a woman they never met. She threatens their lives and family to push them into a series of dangerous situations, controlling their actions using cellphones and other technology.

2008 — Hackers are People Too — Hackers created this documentary to portray their community and break down negative stereotypes. It describes what hacking is, how hackers think, and discusses women in the field.

2008 — Untraceable — Agent Jennifer Marsh (Diane Lane) of the Cyber Crimes Division of the FBI in Portland tries to track down a psychopathic hacker killing people online in live streaming video. As his site gets more hits, victims die faster.

2008 — WarGames: The Dead Code 2008 — Is an American teen hacker playing a terrorist-attack simulator game online a real terrorist intent on destroying the United States? That's what Homeland Security believes and they set out to apprehend him.

*"'I don't believe that any system is totally secure.' - David Lightman, played by Matthew Broderick in **WarGames**. Why: War Games have shown us that computers and AI can help humanity and also destroy it. In the wrong hands and minds, technology can doom us. Thus, securing the systems that are protecting us is key. This movie has been a guiding light in my choice of work and professional path."*

- Ori Eisen, Founder & CEO at Trusona

HACKER'S MOVIE GUIDE

2009 — Echelon Conspiracy — When tech whiz Max Peterson (Shane West) gets sent a mysterious cell phone in the mail, he's unsure of where it came from or what it is — until it starts sending instructions on how to win at the local casino. But it isn't long before Max's newfound luck puts him at the center of a dangerous government conspiracy dealing with the world's security cameras. Will he make it out alive?

2009 — Eyeborgs — In the aftermath of a major terrorist attack, government surveillance in the U.S. is taken to the next level via robotic cameras called "Eyeborgs," which track and monitor all citizens for suspicious behavior. But when photographic evidence from the Eyeborgs doesn't line up with the facts in an ongoing murder investigation, a federal agent starts to wonder, who's really controlling these cameras and what do they want?

2009 — Gamer — Controlled by a teenage gamer's remote device, death-row inmate Kable must battle fellow prisoners every week in a violent online game. Can he survive enough sessions to gain his freedom, free his wife from avatar slavery, and take down the game's inventor?

*"I believe the scenes in both **Homeland Season 5** (illustrating the capabilities of hackers accessing CIA records) and **Skyfall** (James Bond) where the main perpetrator Javier Bardem hacks into MI-6 systems are prime examples of social engineering, insider threats and compromised intelligence officers possessing unique accesses. People not sensitized to this threat believe that such occurrences are a simple flash in the pan but unfortunately for them they don't realize that such events result in the deaths of innocent patriotic men/women serving their country."*

- Timothy Gill, Former U.S. Government Intelligence Officer: National Security Operations Background Investigations/ Insider Threat Subject Matter Expert

HACKER'S MOVIE GUIDE

2009 — The Girl with the Dragon Tattoo — A journalist searches for the killer of a woman who has been dead for forty years, with the help of a young female hacker. When they unravel dark family secrets, they must protect themselves. This Swedish language film was remade in English in 2011.

2009 — Hackers Wanted — This unreleased American documentary originally named "Can You Hack It?" follows the adventures of Adrian Lamo, a famous hacker, and explores the origins of hacking and nature of hackers.

2009 — Shadow Government — What impact does the technological landscape have on our daily lives? This documentary, led by Grant Jeffrey, explores exactly how much of our lives are being digitized and observed in the modern era.

*"I loved (and still love) **Three Days of the Condor**, for its bookish hero and for standing on the cusp between a totally kinetic world and the modern, increasingly virtual one. Redford's Condor survives in those pre-internet days by learning about tactics and tech from books rather than from YouTube and Wikipedia, an analog of the modern digital hero. The coldly mercenary quote from Max von Sydow's creepy bad guy is memorable — 'I don't interest myself in why. I think more often in terms of when, sometimes where; always how much.'"*

- Gary Brown, Dean of Faculty (interim) & Professor of Cyber Law, College of Information and Cyberspace, National Defense University

HACKER'S MOVIE GUIDE

2009 — Transcendent Man — The subject of this documentary from filmmaker Robert Barry Ptolemy is Ray Kurzweil, inventor, futurist and author, and his predictions about the future of technology, presented in his 2005 book, "The Singularity is Near: When Humans Transcend Biology." Ptolemy follows Kurzweil on his world speaking tour, where he discusses his thoughts on the technological singularity, a proposed advancement that will occur sometime in the 21st century due to progress in artificial intelligence, genetics, nanotechnology, and robotics.

2009 — We Live in Public — Directed by Ondi Timoner, this documentary profiles Josh Harris, "the greatest internet pioneer you've never heard of." An early dot.com entrepreneur, Harris founded Psuedo.com, an early streaming content service. In 1999, he began an experiment called "Quiet," in which 100 men and women agreed to give up their privacy to live together under constant video surveillance, so their lives could be streamed online.

2010 — Inception — A thief (Leonardo DiCaprio) who can enter people's dreams and steal their secrets begins using his gift for corporate espionage. Can he also plant an idea into someone's mind? The film won four Oscars.

*"**The Computer Wore Tennis Shoes** is one of the earliest movies I remember watching, not in a theater, and it gave me a lifelong interest in technology and a deep appreciation for Kurt Russel."*

- Jere Miles, Vice President, Cyber-Security, Enterprise Software Solutions

HACKER'S MOVIE GUIDE

2010 — The Social Network — Jesse Eisenberg portrays Harvard student and computer genius Mark Zuckerberg in this drama about the creation of a social networking site that would become Facebook.

2010 — Tron Legacy — In this revamped Tron continuation, Sam (Garrett Hedlund) searches in and out of the computer world for his father, Kevin Flynn (Jeff Bridges), a brilliant computer programmer.

2011 — Mission Impossible: Ghost Protocol — When mega-spy Ethan Hunt (Tom Cruise) is blamed for a terrorist attack on the Kremlin, he and others from his agency, the Impossible Missions Force (IMF), must prove their innocence.

2011 — StuxNet: Cyberwar — First discovered in 2010, the StuxNet computer worm marked the beginning of a new era in cybercrime, attacking — and causing substantial damage to — an Iranian nuclear program. This documentary explores the malware's origins alongside its contributions to the advancement of cyber warfare technology.

*"'There's nothing sadder than a puppet without a ghost.' From **Ghost in a Shell**, 1995. I've always been fascinated by the concept of early AI concepts. It got you wondering about where we are now and how far this field has progressed."*

- Lidor B., Security Researcher at Orca Security

HACKER'S MOVIE GUIDE

2012 — Code 2600 — This documentary explores the rise of the Information Technology Age through the eyes of the people who helped build it and the events that shaped it.

2012 — Genius on Hold — The downfall of Walter L. Shaw, a telecommunications genius who became destitute, and his disillusioned son, who became a notorious jewel thief, are the subjects of this documentary.

2012 — Owned & Operated — Using the lens of the internet, this documentary proves just how much we matter ... as consumers, that is. Society today practically lives for privileged individuals — celebrities and politicians, among others — unknowingly adhering to their wicked ways of gaining control, but there is an awakening on the horizon, and it's going to change everything.

2012 — Panopticon — Living in the digital age, do we really have privacy? This documentary examines how much our daily lives are controlled and watched by omnipresent surveillance, which — as technology advances — has only become harder to avoid.

*"**Three Days of the Condor**, starring Robert Redford as a CIA codebreaker, exemplifies that old maxim that as much as things change, they remain the same. It would be misguided to think that because this movie takes place in the 1970s, that it might not reflect today's reality within the world of espionage. But, today more than ever, the U.S. intelligence community must scour open source, on-line material for hidden messages, codes, and cartography. Back then, Redford's character had to analyze published books for covert clues and messages. Today, intelligence analysts and codebreakers, assisted by artificial intelligence, must find the proverbial needle in the social media haystack. My favorite line for Redford's character when confronted with his CIA employment, is 'I'm not a spy. I just read books.'"*

- Frank Figliuzzi, NBC News National Security Analyst / Former FBI Assistant Director

HACKER'S MOVIE GUIDE

2012 — Reboot — A young female hacker can't remember a traumatic event that leaves her with an iPhone glued to her hand. The phone's timer is counting down to zero and fellow hackers must help her solve the puzzle.

2012 — Shadows of Liberty — Should we trust the media? This documentary examines the five big for-profit conglomerates that control 90 percent of U.S.-based media, raising questions of who to believe in today's political, economical, and social world.

2012 — Skyfall — James Bond (Daniel Craig) must prove he still has what it takes as he tracks down the source of a cyber-terror attack at M16 headquarters and goes up against a genius hacker.

2012 — Tracked Down — Directed by Paul Moreira, this documentary explains how governments around the world monitor their citizens through advanced electronic warfare equipment — equipment that has fallen into the hands of repressive dictatorial regimes in Libya, Syria and Bahrain. Moreira reveals how the technology can be traded in stealth and traces these deals to their source.

*"'Remember, hacking is more than just a crime. It's a survival trait.' Comes from the 1984 movie entitled **Hackers: Wizards of the Electronic Age**."*

- Gregory Crabb, Chief Information Security Officer and Founder at 10-8, LLC

HACKER'S MOVIE GUIDE

2012 — Underground: The Julian Assange Story — This Australian film follows the early career of the WikiLeaks founder, from his start as a teenage computer hacker in Melbourne.

2012 — We Are Legion: The Story of the Hacktivists — Filmmaker Brian Knappenberger documents the hacking group Anonymous, including interviews from group members.

2013 — The Assange Agenda: Surveillance, Democracy and You — At what point does government surveillance put democracy at risk? According to Julian Assange, founder of Wikileaks, we're already there. This documentary explores what may lay ahead for today's digital world if we don't gain control over the various agencies spying on us.

2013 — Big Data: The Shell Investigation — In the digital age, a journalist's sources are endless — when consulting big data, that is. This documentary showcases how a team of journalists used easily accessible channels, such as LinkedIn and Wikipedia, to piece together the truth about Royal Dutch Shell's two-billion-dollar debt to the Iranian government.

*"There are so many great characters featured in the hundreds of movies we've compiled, but I'd have to pick 'HAL 9000' from **2001: A Space Odyssey** as my all-time favorite. When I was young and impressionable, a computer with superior (artificial) intelligence, seemingly smarter than anyone, spoke to astronauts, and to me. Hal was, and was not, a person, and he got me hooked on technology. Stanley Kubrick directed a film in 1968 that is unrivaled more than 50 years after it was released."*

- Steve Morgan, Founder of Cybersecurity Ventures

HACKER'S MOVIE GUIDE

2013 — The Bling Ring — Nicki (Emma Watson) and her fame-obsessed group of friends will do anything to make a name for themselves in Hollywood, including breaking into — and robbing — the homes of elite celebrities, which, if not for the internet, would never have been possible.

2013 — DEFCON: The Documentary — The world's largest hacking conference, DEFCON, has long since had a strict no-camera policy ... until now. This documentary follows the four days of DEFCON's 20th-anniversary event, highlighted by commentary from attendees and staff.

2013 — Disconnect — Three intersecting stories center around the impact of the internet on people's lives. The characters include a victim of cyberbullying, a lawyer who communicates constantly through his cellphone but can't find time to connect with his family, and a couple whose secrets are exposed online.

2013 — DSKNECTD — Do electronic devices bring people together or pull them apart? This documentary examines how human interaction has changed in light of the rise of technologies such as cellphones, social media, and the internet.

*"**WarGames** is one of my all time favorites and I recently watched it again with my teenage son and daughter, who both thoroughly enjoyed it. The film had an impact on me as a young person as it was the first movie that showed the true power of hacking as well as the consequences of unchecked AI — before that term was even used! In the current, geopolitical landscape, I also think it's a must watch to show the potential consequences of conflict in the nuclear age."*

- Gordon Lawson, CEO at NetAbstraction, Inc.

HACKER'S MOVIE GUIDE

2013 — The Fear That Has 1000 Eyes — This documentary looks at various terrorist attacks — New York, London, Madrid, and Oslo — and discusses how they have changed urban life, including increased electronic surveillance. It also explores the balance between the need for security and freedom.

2013 — The Fifth Estate — Based on real events, the film begins as WikiLeaks founder Julian Assange (Benedict Cumberbatch) and Daniel Domscheit-Berg join forces as underground watchdogs and create a platform for whistleblowers to leak covert data to expose government secrets and corporate crimes.

2013 — Goodbye World — More than one million cellphones simultaneously receive a two-word message, followed by the collapse of the power grid and widespread panic. A group of people who find shelter in a cabin soon find out what it's like to live in a post-apocalyptic world.

2013 — Google and the World Brain — The Google Books Library Project is certainly ambitious, but is it feasible? This documentary examines Google's plan to open the world's largest virtual library, as well as the many issues that may stem from it, such as copyright infringement and lack of online privacy.

*"**The Matrix** (1999) is without a doubt the greatest movie I've ever seen. It's just so densely woven with hidden meaning."*

- Daniel Kelley, Reformed Convicted British Computer Hacker, Freelance Security Researcher

HACKER'S MOVIE GUIDE

2013 — Her — In this futuristic story, a lonely writer (Joaquin Phoenix) develops an unlikely relationship with an operating system designed to meet his every need.

2013 — Identity Thief — When a woman (Melissa McCarthy) steals the identity of Sandy Patterson (Jason Bateman), a financial firm account executive, and wrecks his credit rating, he sets out to confront her.

2013 — In Google We Trust — Who's keeping tabs on your data? This revealing documentary gives viewers an inside look into how — and why — our digital interactions are tracked and recorded. If you're worried about the consequences, watch this now.

2013 — Mickey Virus — In this Bollywood hacker comedy, Delhi Police must seek the help of a lazy hacker to solve a case.

2013 — Terms and Conditions May Apply — This documentary exposes how much the internet and cellphone usage allows corporations and governments to learn about people.

*"My favorite cyber related movie of all time is **Sneakers**, from 1992, largely because of the all-star cast (Robert Redford, Sydney Poitier, Dan Akroyd, River Phoenix, Ben Kinsley, David Strathairn) and the subtle emphasis on reconnaissance activities that always take longer than expected for a threat actor."*

- Jim Routh, Board Member, Advisor, Investor and Former Fortune 500 Chief Information Security Officer

HACKER'S MOVIE GUIDE

2013 — TPB AFK: The Pirate Bay Away from Keyboard — This Swedish documentary film, directed and produced by Simon Klose, focuses on the lives of the three founders of The Pirate Bay — Peter Sunde, Fredrik Neij, and Gottfrid Svartholm — and the Pirate Bay trial.

2013 — The Value of Your Personal Data — Produced by the acclaimed VPRO series, this documentary discusses the companies that collect your personal data, who buys it from them, how it is used, and who owns it. It also gives advice on how you can gain back control of it and stop being targeted and manipulated.

2013 — War on Whistleblowers: Free Press and the National Security State — This documentary by Robert Greenwald highlights four cases — Michael DeKort, Thomas Drake, Franz Gayl and Thomas Tamm — where American government employees and contractors exposed fraud and abuse through the media at the risk of their personal and professional lives.

*"As a cybersecurity expert, I have always been inspired by the movie **Independence Day**. I love seeing the final battle turn in favour of human civilization using the power of 'Ethical hacking' when a malware is uploaded into the aggressor's spaceship. I have always wished that our industry gets better at fighting a collective battle with our common enemy — the cyber criminals."*

- Seemant (Sam) Sehgal, Founder & CEO at BreachLock

HACKER'S MOVIE GUIDE

2014 — Algorithm — A computer hacker who specializes in breaking into secure systems, including the telephone company and people's personal accounts, hacks a government contractor and discovers a mysterious computer program, thrusting him into a revolution.

2014 — The Bureau of Digital Sabotage — What is privacy? This documentary argues it is nonexistent in today's digital age, delving into our new reality and its most crucial issues by asking citizens to stand up when mass surveillance crosses the line.

2014 — Citizenfour — This documentary by Laura Poitras about whistleblower Edward Snowden and the NSA spying scandal includes interviews of Snowden in Hong Kong in 2013 and features work by journalist Glenn Greenwald.

2014 — Digital Amnesia — An in-depth investigation into the shelf life of digital data and the vulnerable nature in which we store information today, featuring commentary from organizations such as Internet Archive and The Archive Team.

*"**WarGames** put hacking on the map. It gave everyone a view of how connected we really are and the impact a major hack could have. Little did we know how prophetic it would be."*

- George Kurtz, Co-founder & CEO at CrowdStrike

HACKER'S MOVIE GUIDE

2014 — Ex Machina — A young programmer wins a competition that makes him the human component in a groundbreaking experiment where he must evaluate the capabilities and consciousness of Ava, a breathtaking A.I.

2014 — The Hackers Wars — This documentary discusses hacktivism in the United States, including the government's surveillance and persecution of hackers and journalists.

2014 — The Human Face of Big Data — This documentary, directed by Sandy Smolan and narrated by Joel McHale, initially focuses on Big Data's positive aspects, such as how the massive gathering and analyzing of data in real-time through a multitude of digital devices allows us to address some of humanity's biggest challenges and improve lives globally. It also highlights how the accessibility of this data comes at a steep price.

2014 — The Imitation Game — M16, the newly created British intelligence agency, recruits mathematician Alan Turing (Benedict Cumberbatch) and his team to crack the Germany's Enigma code during World War II. Nominated for 8 Oscars.

*"My pick from the Hackers Movie Guide list is **1984**, which is, of course, the movie version of the seminal work on 'Big Brother' by Orwell. In the end, the movie is aimed at all forms of government and political persuasion that overreach. There are two alternative endings to the film. The UK version ends with a defiant Winston Smith and Julia being executed by the authorities. The U.S. version is more faithful to Orwell's book and concludes with Winston and Julia being brainwashed into becoming loyal followers of 'Big Brother.' Particularly relevant in today's world and you get to pick the ending and your poison.*

- Richard Seewald, Founder & Managing Partner at Evolution Equity Partners

HACKER'S MOVIE GUIDE

2014 — Inside The Dark Web — Internet surveillance takes center stage in this documentary that details the pros and cons of the World Wide Web. With all types of surveillance taking place globally — government, commercial, and more — what does the future look like for those living in the digital age?

2014 — The Internet's Own Boy: The Story of Aaron Swartz — Filmmaker Brian Knappenberger explores the life and work of Reddit co-founder Aaron Swartz, a programming prodigy and information activist who committed suicide at the age of 26.

2014 — Killswitch — In a world where we rely so heavily on the internet, what happens if it comes under attack? This award-winning documentary centers on the threat of internet censorship and what we risk losing if we don't fight back, such as free speech, democracy, and innovation.

2014 — Men, Women and Children — What does it mean to be a parent in the age of social media? This film follows multiple families, each with their own relationships to the internet, as they overcome various challenges, including eating disorders and video game culture.

*"**Office Space**, for sure, is my favorite hacker movie! Besides the obvious satirical illustration of a male-cultured tech company, the fact that the hackers made an error in their penny-scraping virus is good old Darwinism at its finest!"*

- Debbie Gordon, Founder & CEO at Cloud Range

HACKER'S MOVIE GUIDE

2014 — Open Windows — A blogger finds out he's won a dinner with an actress he devotes his website to and is disappointed when she cancels. When he gets a chance to spy on her every move with his laptop, his life gets crazy.

2014 — The Signal — Nic, who is a student at MIT, is on a road trip with two companions when an annoying computer hacker distracts them. They track him to an abandoned shack. After strange occurrences, Nik wakes up wounded and disoriented, wondering what has happened to his friends, and who are these people in space suits?

2014 — Transcendence — Dr. Will Caster, renowned artificial intelligence researcher, is on a controversial quest to create a fully sentient machine, but are the dangerous consequences that follow worth it? This science-fiction thriller stars Johnny Depp, Rebecca Hall, Morgan Freeman, and Paul Bettany, among others.

2014 — Unfriended — a mysterious, supernatural force haunts a group of online chat room friends using the account of their dead friend.

*"As a lucid dreamer, I often ponder consciousness and appreciate Christopher Nolan's vision of subconscious security in his film **Inception**. Hacking the mind fosters new ways of thinking outside the box, or in this case, outside the mind and traditional thought boundaries."*

- Cherokee Boose, Technical Instructor, Cloud & Cybersecurity Enthusiast

HACKER'S MOVIE GUIDE

2014 — Who Am I — A subversive hacker group intent on gaining global fame invites a young German computer whiz to join them.

2015 — Big Data: Unlocking Success — Experts from Berkeley Research Group, Lawrence Berkeley National Laboratory, and Microsoft look into the use of data science and its allied fields in this documentary, noting several real-life examples, including events at Johns Hopkins University and MGM Resorts International.

2015 — Blackhat — Convicted hacker Nicholas Hathaway (Chris Hemsworth) joins a team of American and Chinese technical experts to track down a Balkan cyberterrorist operating in Southeast Asia.

2015 — Cyberbully — In this made-for-TV movie, A British teenage girl (Emily Osment) retreats from family and friends when a computer hacker forces her to do his bidding, threatening to leak compromising photos of her if she doesn't do what he asks.

2015 — Cybertopia: Dreams of Silicon Valley — A technological revolution is looming in Silicon Valley. This documentary explores the future of digitized reality, as well as how daily life has already changed as a result of the dedicated individuals residing in California's tech headquarters.

*"Something deep within me resonates with **V for Vendetta** ... the way it compels the audience to view media with skepticism, the audacity of a regime to fake a terror attack, the satisfaction of seeing state buildings burn. The concept has long been lost; it's too easy to see tyranny from the outside looking in, without noticing the water has been boiling this whole time."*

- Reality Winner, U.S. Air Force Veteran and former NSA Contractor

HACKER'S MOVIE GUIDE

2015 — Debug — Six young hackers assigned to fix the computer system on a vessel drifting in deep space become prey to an artificial intelligence source intent on becoming human.

2015 — Deep Web — Filmmaker Alex Winter interviews the people behind the Deep Web and bitcoin and follows the arrest and trial of Ross Ulbricht ("Dread Pirate Roberts"), founder of online black market Silk Road.

2015 — Democracy: Im Rausch der Daten — From Swiss director David Bernet, this documentary tells the story of how politicians in the EU are working to protect society from the dangers of Big Data and mass surveillance.

2015 — Digitale Dissidenten — What price do whistleblowers pay? Interviews with David Ellsberg, Edward Snowden, William Binney, Thomas Drake, Annie Machon, and Julian Assange shed light on the cost of having a conscience in the dark world of government surveillance.

*"I have seen **Independence Day** over 45 times. Uplifting to watch a flawed but bold underdog finding a way to triumph over a massive, technologically superior invading force."*

- Adam K. Levin, Author, "Swiped: How to Protect Yourself in a World Filled with Scammers, Phishers and Identity Thieves"

HACKER'S MOVIE GUIDE

2015 — Furious 7 — Mr. Nobody (Kurt Russell), a government operative, enlists Dominic Toretto to find a hacker who has created God's Eye, a device that can hack any technology that uses a camera. In return, they can use the device to find and stop Deckard Shaw (Jason Statham), who is seeking revenge against Toretto and his crew for his comatose brother.

2015 — A Good American — This documentary film tells the story of Bill Binney, former technical director of the NSA, a group of exceptional code-breakers, and a program called ThinThread, which, if not dumped three weeks prior to 9/11, would've been able to stop the terrorist attacks that took almost 3,000 lives.

2015 — Hacker's Game — A cyber-detective working for a human rights organization and a hacking expert with shady connections meet on a rooftop and bond over a game of virtual chess. Will their romance survive deception?

2015 — Jobs vs. Gates: The Hippie and The Nerd — This documentary tells the story of two of the biggest men in tech, Bill Gates and Steve Jobs, and the spectacular rivalry between them. Despite landing on two different sides of the battle between Mac and PC, Jobs and Gates' mutual respect for one another endured the test of time.

Hyperlinks to movies at *HackersMovieGuide.com*

*"For me, it's an easy choice. **The Imitation Game** was released in 2014 — the same year that I became the Chief Information Security Officer at Northwell. Prior to taking the role, I had seen **The Imitation Game** with my niece at a local movie theatre. Not only was the movie produced well (it was nominated for 8 Oscars), the story was intriguing and impactful. I got chills learning that Alan Turing, the father of modern computing, was credited with shortening WWII by about 2 years and saving between 14-21 million lives by cracking the Enigma encryption code. For our very first offsite team event, I rented a local movie theatre and showed the movie. It gave everyone on my team an appreciation and perspective of the enormity and importance of their role."*

*- **Kathy Hughes, Chief Information Security Officer at Northwell Health***

HACKER'S MOVIE GUIDE

2015 — Mapping the Future — Are our lives predictable? If you take the internet's overflowing amount of data into consideration, the answer is yes. This documentary explores how the abundance of data gathered on the internet in recent years led to a mathematical algorithm for human life.

2015 — Terminal F/Chasing Edward Snowden — This documentary discusses what motivated Edward Snowden, an NSA analyst-turned whistleblower, to leak classified information about global surveillance programs used by the American government, leading him to flee to Hong Kong and later to Russia to evade authorities.

2015 — War for the Web — Directed by J. C. Cameron Brueckner, this documentary demystifies the physical infrastructure of the internet and explores the issues of ownership and competition in the broadband marketplace, privacy, and security.

2016 — Anonymous — A young Ukrainian immigrant turns to hacking and identity theft to support his parents, with help from a friend who is a black-market dealer. Petty crimes soon escalate. The film is also known as "Hacker."

*"Movies are not always the best medium to capture the essence of what hacking is, often exchanging credibility for special effects; however, there are three movies which I feel are worth a mention. **WarGames** (1983) introduced computer hacking to the masses, and helped popularize computers just as they were becoming mainstream. **Sneakers** (1992) shied away from the oft-used image of the hacker as a solo malcontent, showing them as team players and giving many in the public their first glance into what pentesters do for a living. Lastly, I have to give an honorable mention to **The Matrix Reloaded** (2003) for its credible use of nmap."*

- Aryeh Goretsky, Distinguished Researcher at ESET

HACKER'S MOVIE GUIDE

2016 — Backlight: Cyberjihad — Can social media become a weapon? This documentary examines jihadism and its online presence, which, without any hindrance, has only grown larger over the past fifteen years.

2016 — Cyber War — Hackers pose a universal threat; how can we defend ourselves? This documentary explores how governments are building up protection against the ever-growing number of digital threats, including by recruiting those with the brains to wage cyberwar and espionage when necessary.

2016 — Data Center: The True Cost of the Internet — Every day, 247 billion emails are sent through the web. Have you ever wondered what powers them? This eye-opening, high-tech documentary takes viewers inside the digital warehouses that run the internet, otherwise known as data centers.

2016 — Down the Deep, Dark Web — Venture down the internet's rabbit hole into the secretive world of the dark web, guided by crypto-anarchists, cypherpunks, and hackers. This documentary will make you question everything you thought you knew about the darknet.

"For me, the most exciting part about cybersecurity is the non-stop action. In cybersecurity, you have the thrill of the investigation and the speed of the chase in support of customers. That's why I loved **The Girl with the Dragon Tattoo**. *The plot advanced with speed, trying to follow the discoveries — one after another — to arrive at the ultimate girl. Just like cybersecurity,* **The Girl with the Dragon Tattoo** *had all the breakneck speed and investigation and chase that make what we do every day in cybersecurity such a thrilling challenge."*

- Aleksandr Yampolskiy, CEO and Co-Founder, SecurityScorecard

HACKER'S MOVIE GUIDE

2016 — Gringo: The Dangerous Life of John McAfee — Complex antivirus pioneer John McAfee made millions before leaving the U.S. to live in a compound in the jungle in Belize. This Showtime documentary, which he calls fiction, portrays his life in Belize and 2012 departure after a neighbor was murdered.

2016 — The Haystack — Due to sophisticated hacking techniques and the terrorist organizations that often use them, the British Parliament began reviewing the Investigatory Powers Bill, legislation that would provide more leniency in the interception of private email and phone communications. Prior to the bill passing in 2016, this documentary examined how effective it would be, if it was necessary, and what citizens would have to give up once the bill was implemented.

2016 — I.T. — Aviation tycoon Mike Regan (Pierce Brosnan) hires an I.T. consultant on a temporary basis to do some work at his house and is so impressed he gives him a full-time job. He's fired when he oversteps boundaries and seeks revenge against the businessman and his family.

2016 — Jason Bourne — Former CIA agent Jason Bourne (Matt Damon) is drawn out of hiding to uncover more about his past while fighting cyberterrorism.

*"**Brazil** is a great movie about how our own technology, which we rely on, can be used against us. Especially in a world of too much surveillance, the tech can be used to surveil the surveilers. 'Suspicion builds confidence' is the best quote from the movie."*

- Chris Kubecka, CEO at HypaSec

HACKER'S MOVIE GUIDE

2016 — Lo and Behold: Reveries of the Connected World — Filmmaker Werner Herzog examines the internet and how it affects human interaction and modern society.

2016 — National Bird — A chilling documentary in which three military veterans blow the whistle on the secret U.S. drone war, highlighting America's modern warfare program through the harrowing experiences of those involved.

2016 — Nerve — Friends pressure a high school senior to join the popular online game Nerve. She becomes caught up in the thrill of the adrenaline-fueled competition, partnered with a mysterious stranger, but the game takes a sinister turn.

2016 — Offline is the New Luxury — Since the dawn of the internet, humanity has slowly but surely become increasingly dependent on various smart devices — phones, tablets, and laptops alike. This documentary asks one poignant question: what would the world be without them?

*"My favorite movie is **Terminator 2: Judgment Day** because it foresees a dystopian future with conflicts between AI and human race. Such a future is much more closer now than when the movie was first aired in the eighties. With the rapid advancement of AI, the cyber defense industry will be the new military industrial complex."*

- Jonathan Zhang, CEO at WhoisXML API

HACKER'S MOVIE GUIDE

2016 — Rise of the Trolls — Is being anonymous a blessing or a curse? In this documentary, filmmakers Jonathan Baltrusaitis and Paul Kemp explore the unnerving truths surrounding internet anonymity, dark instincts, and freedom in cyberspace.

2016 — Risk — Laura Poitras spent six years making this documentary about WikiLeaks founder Julian Assange, who gave her the opportunity to closely film him but later tried to censor the film.

2016 — Silicon Cowboys — This documentary tells the true story of how three unsuspecting friends became computing pioneers by dreaming up the Compaq Computer — a portable PC that would directly impact the future of computing and consequently shape the world we live in today.

2016 — Snowden — Joseph Gordon-Levitt stars as Edward J. Snowden in Oliver Stone's biopic of the former National Security Agency contractor who becomes disillusioned with the intelligence community and leaks classified information, becoming a fugitive from law and a hero to many.

*"Since all of my social engineering calls, what I called rusing, started with a conversation, I'll go with Coppola's ahead-of-its-time classic **The Conversation**. The cast alone — Gene Hackman, Harrison Ford, Teri Garr, John Cazale — makes this worth watching."*

- Robert Kerbeck, Corporate Spy and Author of "RUSE: Lying the American Dream from Hollywood to Wall Street"

HACKER'S MOVIE GUIDE

2016 — State of Surveillance — In this documentary film, Edward Snowden — infamously known for leaking classified information from the National Security Agency — invites viewers into the disturbing world of government surveillance. A must-see for anyone who feels like they're being watched.

2016 — Stingray — This documentary enlightens viewers to just how advanced surveillance technology has become, highlighting the Stingray, which, despite going by many different names, has certified itself as one of the most powerful surveillance devices of all time, though many see it as an invasion of privacy.

2016 — What Makes You Click — Described as both a fascinating psychological study and a gripping cautionary tale, this documentary from the VPRO Backlight series discusses how companies adapt their websites and apps to get consumers to stay on them longer and spend more money.

2016 — Zero Days — Alex Gibney's documentary focuses on Stuxnet, or "Operation Olympic Games," a malicious computer worm developed by the United States and Israel to sabotage a key part of Iran's nuclear program.

*"Fond memories of the late 90's flick **Enemy of the State**, showcasing in 'real' terms how the impact to confidentiality, integrity, and/or availability of an information asset can affect anyone, anywhere with the right tools, techniques and procedures."*

- Héctor Guillermo Martínez, President at GM Sectec

HACKER'S MOVIE GUIDE

2017 — AlphaGo — Can an AI challenger defeat a legendary master in the game of Go? The battle between man and machine takes center stage in this documentary film chronicling Lee Sedol's nail-biting match against AlphaGo, a computer program devised by Deep Mind Technologies to master the 3,000-year-old game.

2017 — The Circle — Mae (Emma Watson) lands a dream job at a technology and social media company called the Circle. She is soon handpicked by the founder (Tom Hanks) to participate in an experiment that takes transparency to a new level.

2017 — The Crash — The government enlists a team of white-collar criminals to thwart a cyberattack that threatens to bankrupt the United States.

2017 — Facebook: Cracking the Code — What does Facebook know about you? This documentary digs deep into the security issues that social media giant Facebook doesn't want you to know, including how they track browsing data, promote targeted ads, and spread false information.

2017 — The Fate of the Furious — A cyberterrorist known as Cipher (Charlize Theron) coerces Dom (Vin Diesel) into working for her, hacks and takes control of cars, and reaps havoc.

*"I started paying great attention to what I share and do online after watching the 2019 documentary **The Great Hack**, as it made me aware of the dangers of the digital footprints we leave online, which can be used to create data points in order to psychologically influence/change people's behavior by whoever has access to it."*

- Mo Adeolu, Creative Director at Cybercrime Magazine

HACKER'S MOVIE GUIDE

2017 — Ghost in the Shell — Major Mira Killian (Scarlett Johansson) is saved from a terrible crash and cyber-enhanced as a soldier to stop the world's most dangerous criminals. She soon discovers that her life was actually stolen and determines to recover her past, find out who did this to her, and stop them before they do it to others.

2017 — Kim Dotcom: Caught in the Web — This documentary tells the story of Megaupload founder Kim Dotcom, a super-hacker, entrepreneur and notorious internet pirate accused of money laundering, racketeering, and copyright infringement.

2017 — Meeting Snowden — Edward Snowden, former CIA and NSA collaborator, has become infamous for initiating one of the most controversial mass surveillance scandals of all time. But who is he really? In this documentary, Lawrence Lassig and Birgitta Jónsdóttir sit down with the whistleblower to discuss the future of democracy, among other things.

2017 — Nothing to Hide — Do we really have nothing to hide? This documentary takes an in-depth look into government surveillance today and why the public seems to have unanimously accepted the loss of their right to online privacy.

*"As a lover of all things horror, **The Social Dilemma** scared me more than I'd like to admit. This documentary is deeply disturbing — more so than any slasher or paranormal tale — but a necessary watch for all of us living through the digital age."*

- Amanda Glassner, Staff Writer and Reporter at Cybercrime Magazine, Station Manager at WCYB Digital Radio

HACKER'S MOVIE GUIDE

2017 — Silk Road: Drugs, Death, and the Dark Web — In 2011, Ross Ulbricht launched the anonymous darknet website, Silk Road. This documentary explores everything the black market site had to offer, as well as the events leading up to — and following — Ulbricht's inevitable arrest.

2017 — Stare Into The Lights My Pretties — Many of us live behind a screen, but at what cost? This documentary examines why so many people are addicted to their screens, all the while exploring the impact this collective mindset may have on our future.

2017 — Thoughtcrime — Directed by Bernd Riemann, this documentary compares the disturbing similarities between the disclosures made by former CIA employee Edward Snowden in 2013 and the world created by George Orwell in the dystopian science fiction film 1984, where independent thinking was censored and holding thoughts opposing those in power was considered a criminal act.

*"**The Matrix** is one of my all-time favourite movies. It represents the experience of hacking in a way most of us, certainly in 1999, had never seen before. The film has stood the test of time and Neo must be the ultimate cyber superhero for uncovering the truth and freeing the world. **The Matrix** shows us that tech can create, control and endanger. Further, that it can be hacked. With references to standard hacking practices in some scenes, the real hacking is metaphorical, for example, the red-pill lesson, and everyone remembers that!"*

- Jane Frankland, Cybersecurity Entrepreneur, Author, Speaker, Influencer

HACKER'S MOVIE GUIDE

2017 — Weapons of Mass Surveillance — Directed by Elizabeth C. Jones, this documentary explores the dangerous alliance of Western surveillance technology and Middle Eastern governments who use that technology to monitor their citizens. It discusses how high-tech cyber-surveillance enables governments to record, archive, and analyze communications.

2018 — Anon — In a world where everyone's lives are transparent, traceable, and recorded by the authorities, causing crime to almost cease, a detective (Clive Owen) tries to solve a series of murders that may involve a mysterious hacker (Amanda Seyfried).

2018 — Assassination Nation — After an anonymous hacker leaks the private information of the people of Salem, suspicion falls on four teenage girls who are targeted by the community.

2018 — Black Code — Told through accounts from exiled Brazilian activists, Syrian citizens, and Tibetan monks, this documentary explores how governments across the world are exploiting the internet to gain control over their people.

*"The hacker movie that I enjoy is **Independence Day.** While not thought of as a 'hacker movie,' it was a hack that saved the day! 'We gave it a cold. We hacked into the alien ship and took down its defense system, and were able to battle to win back our world.'"*

- Zack Hack, On-air Personality at WCYB Digital Radio

HACKER'S MOVIE GUIDE

2018 — Cam — Alice (Madeline Brewer) is an exotic webcam performer whose life is turned upside down when her channel — and livelihood — are stolen by a scarily accurate look-alike. Determined to get her identity back, Alice sets out to unmask, and ultimately take down, the mysterious hacker.

2018 — The Cleaners — Nothing stays on the internet forever. The web's self-cleaning nature dominates this documentary led by field experts, enlightening viewers to the process of content removal, alongside asking one poignant question: who decides what should, and should not, be seen?

2018 — The Creepy Line — Google and Facebook take center stage in this documentary that depicts how the social media platforms have perfected various manipulation tactics, all in the name of gaining access to the public's personal and private information. Told through first-hand accounts, scientific experiments, and an in-depth analysis.

2018 — The Defenders — Produced by Cybereason, this documentary invites viewers inside the world of cybercrime, analyzing four of the most well-known cyberattacks throughout history — highlighted by commentary from those working to protect our institutions from the ever-changing cyber threat landscape.

*"**WarGames** was the movie for me. Even though I was not into computers or even knew what they were, it was the first movie to get me interested and thinking about them. Then once I got access to one, that movie made me think about all the possibilities of what I could do with one."*

- Larry Whiteside, Jr., Co-founder & President at Cyversity

HACKER'S MOVIE GUIDE

2018 — Digital Addicts — How much do screens affect children's brain development? This documentary follows a group of kids growing up in the digital age, highlighting the harmful, hyper-addictive nature of social media platforms, mobile phones, and more.

2018 — Do You Trust This Computer? — Is a smarter machine always a better machine? This documentary digs deep into the dangers of artificial intelligence, highlighted by commentary from some of the field's most respected individuals, including Elon Musk.

2018 — Edward Snowden: Whistleblower or Spy? — In 2013, Edward Snowden infamously leaked highly classified information from the NSA. Five years later, this documentary looks back at the sensational time through interviews with participants and witnesses, including some who are speaking out for the first time.

2018 — The Feeling of Being Watched — This documentary is the result of journalist Assia Bendaoui's investigation into rumors that the FBI has monitored her quiet, predominantly Arab-American neighborhood near Chicago since the 1990s. Her research exposed one of the FBI's largest counter-terrorism investigations before 9/11.

*"One of my favorite movies growing up was **Jurassic Park**. Mainly for the dinosaurs but I also learned that you better not hack a computer system unless you want to get eaten by a goo-spitting dinosaur while fixing a sign."*

- Kyle Haglund, Audio Engineer at Cybercrime Magazine and WCYB Digital Radio

HACKER'S MOVIE GUIDE

2018 — General Magic — This is the story of one of tech's most influential and least memorable companies. Featuring commentary from members of the original Macintosh team alongside the creators of eBay, iPod, iPhone, and Android, this documentary explores how General Magic created the first hand-held personal communicator, aka smartphone, and what happened after.

2018 — The Girl in the Spider's Web — Computer hacker Lisbeth Salander (who is also an avenging angel for abused women) and journalist Mikael Blomkvist find themselves caught in a web of spies, cybercriminals and corrupt government officials.

2018 — Hacked — After losing his job to a state-of-the-art supercomputer, a disgruntled computer technician decides to test his replacement. In the meantime, a group of hackers infiltrates the building to steal the new technology.

2018 — Inside Facebook: Secrets of a Social Network — Which is more important: money or morality? This eye-opening documentary takes viewers inside Facebook's moderating hub, demonstrating how the social media company regulates harmful content, such as child abuse and hate speech — although the results prove to be more concerning than comforting.

*"**2001: A Space Odyssey** is probably my favorite movie of all time. The movie depicts a very plausible near-future in a realistic manner. It attempts to answer questions of where we come from and what could be our path to the stars."*

- Joe Aiello, Vice President of Infrastructure & Cybersecurity, Suffolk Federal Credit Union

HACKER'S MOVIE GUIDE

2018 — Inside the Russian Info War Machine — How does Russia undermine democratic governments, alter world events, and manipulate public opinion? In this documentary, acclaimed journalist Paul Moreira breaks down the Russian information war machine, including its hidden weapon: the trolls and hackers pushing Russia's agenda across cyberspace.

2018 — Irumbu Thirai — A cat and mouse game for the digital age. After losing millions of dollars to a group of cybercriminals, a soldier sets out on a quest to get back everything he lost. Will his efforts be enough?

2018 — Johnny English Strikes Again — After a cyberattack reveals the identity of all of Britain's active undercover agents, MI7 agent Johnny English must come out of retirement to find the mastermind hacker.

2018 — King of Crime — Marcus King (Mark Wingett) was a well-known crime lord on the streets ... that is, until he brought his illegal empire to cyberspace. When Islamic extremists threaten everything he's built, the newly cemented king of British cybercrime will do everything in his power to maintain his status.

*"**WarGames** is classic! And was the movie that inspired me to learn more about cybersecurity. While a bit dated, it does a nice job of telling the tale of unintended consequences of breaking onto systems/ backdoors and the havoc that can ensure. And, now as a mother, it is a tale of the trouble teenagers can cause!"*

- Sandra Toms, Senior Vice President at Mandiant, former VP & Architect at RSA Conference

HACKER'S MOVIE GUIDE

2018 — Ocean's 8 — On a mission to pull off an impossible heist at New York's renowned Met Gala, hacker 9Ball (Rihanna) launches a spear-phishing campaign against an employee at the Metropolitan Museum of Art, gaining access to the museum's security camera system and giving her all-female crew the insight they need to successfully steal one of the most valuable jewelry pieces in the world.

2018 — Searching — A man becomes desperate when his 16-year-old daughter disappears and a police investigation is futile. Hoping to find clues, he searches her laptop, scours photos and videos, and begins contacting her friends.

2018 — Unfriended: Dark Web — After a teen finds a mysterious laptop, he invites several friends to play a game online. The night turns deadly when they become the target of cyber-terrorism.

2019 — BD2K: Big Data to Knowledge — Told through the stories of two patients battling disease in the information age, this documentary film explores how big data has changed the way medicine is practiced, as well as its effect on doctor-patient relationships.

*"My absolute favorite on the list has got to be **Office Space**! I first remember watching it very early in my career. Hilarious from the red stapler to busting up the printer with a fantastic soundtrack AND a genius hacking idea. This one is a must watch for everyone who has ever dwelled in a beige cubicle!"*

- Heather Engel, Managing Partner, Strategic Cyber Partners

HACKER'S MOVIE GUIDE

2019 — Cyber Crime — In this documentary, 10 leading cybercrime experts discuss how billions of dollars a year are stolen or lost as a result of cybercrime, destroying businesses and lives.

2019 — Dataland — Living in a world that's practically run by AI, it's hard to think we've only just scratched the surface of what the technology is capable of — but it's true. This documentary explores what the world's top data scientists are working on behind closed doors.

2019 — The Great Hack — This documentary examines the Cambridge Analytica scandal through the roles of several people affected by it.

2019 — HAK_MTL — Tech companies claim to protect our privacy, but is it true? In this eye-opening documentary, a group of Canadian hackers launch an investigation into the internet and how it continues to track, store, and share users' data, despite assurances that it doesn't.

*"The 1992 movie **Single White Female** is one of my all-time favourites, based on the1990 thriller 'SWF Seeks Same' by John Lutz, where a young woman advertises for a female roommate after her boyfriend moves out. Groundbreaking in its day, this psychological thriller covered everything from stalking to identity theft, obsessive pathological behaviors to extreme violence — enough to put you off roommates for life. My favourite aspect, the outstanding female contributors, directed by Barbet Schroeder and starring Bridget Fonda and Jennifer Jason Leigh."*

- Dr. Mary Aiken, Professor of Cyberpsychology & Chair of Department of Cyberpsychology at Capitol Technology University

HACKER'S MOVIE GUIDE

2019 — Hero or Villain? The Prosecution of Julian Assange — Depending on who you're talking to, the name Julian Assange will provoke one of two feelings: fury or awe. This documentary, led by the ABC Four Corners Team, chronicles an investigation into the founder of WikiLeaks, featuring commentary from some of the individuals who knew him best.

2019 — Kee — Siddharth (Jiiva) and Shivam (Govind Padmasoorya) share an affinity for hacking, but that's all they have in common. When the two unexpectedly cross paths, a fight between hacking for good and evil breaks out — and the consequences are fatal.

2019 — Machine Learning: Living in the Age of AI — How do we interact with AI? The technology has cemented itself as one of the foundations of our digital age, but has yet to reach its full potential. This documentary examines what the future of artificial intelligence will look like and the many possibilities ahead of us.

*"When I watched the movie **Hackers** back in 1995, I had just graduated high school and began my journey to obtain my bachelor's of computer science at Old Dominion University. Acid Burn inspired me so much that I decided I wanted to be a hacker too. The rest, as they say, is history."*

- Laura Deaner, Chief Information Security Officer, Northwestern Mutual

HACKER'S MOVIE GUIDE

2019 — Official Secrets — Katharine Gun made headlines in 2003 after blowing the whistle on an illegal NSA spy operation. This drama film, starring Kiera Knightly and Matt Smith, chronicles the scandal, as well as the ensuing legal battles that uncovered top-secret manipulation tactics used by the highest levels of government in both the U.S. and the UK.

2019 — Password — A police officer hunts for a cybercriminal who is destroying people's lives by hacking their passwords.

2019 — The Secrets of Silicon Valley — Directed by James Corbett, this documentary looks at the long and detailed history of Silicon Valley, located in the San Francisco Bay area, including how it was founded in the aftermath of World War II, the technology companies located there that have shaped the world through innovation, the ties between different companies and the government, and according to Corbett, the shadowy underworld hiding beneath the surface and why Big Tech means big trouble.

*"You have to love **WarGames** — Artificial Intelligence (AI) / Machine Learning (ML) is both the problem and the solution! That's about right..."*

- Bob Ackerman, Founder & Managing Director at AllegisCyber Capital

HACKER'S MOVIE GUIDE

2019 — Third Eye Spies — Directed by Lance Mungia, this documentary reveals how an experiment in psychic abilities at Stanford Research Institute led to the CIA's study of psychic abilities for more than 20 years for use in their top-secret spy program. Parapsychologists Russell Targ and Dean Radin are interviewed, along with dozens of others, regarding recently declassified information.

2019 — Unfriends — In this Bollywood thriller, Veer, who has an idea for a startup, receives a Facebook friend request from Vijay, who becomes his investor. While on a long celebration drive, they meet a girl named Mauli. When Vijay rapes her and intends to kill her, Veer comes to her rescue and helps her escape. When she is later subjected to abuse on the internet, Veer seeks justice for her.

2019 — WannaCry: The Marcus Hutchins Story — Marcus Hutchins, a British computer researcher, became an "accidental hero" when he discovered a kill switch in May 2017 that stopped the spread of WannaCry, hours after the ransomware affected thousands of systems across the world. Three months later, the FBI arrested him because of his involvement in a banking trojan. This documentary, directed by Hugo Berkeley, is his firsthand story.

*"'Teller: May I ask why you are closing your account with us today sir?' 'Bishop: Well, I just had this weird feeling that my money wasn't safe here anymore.' I loved this line when I saw **Sneakers** in the theater and love it even more now. It has perhaps even more relevancy today, as stealing money from financial institutions is not just the purview of cybercriminals but of nation-states as well. In many ways, Bishop's response was a harbinger of the current state of affairs, which makes the movie even more prophetic."*

- Emilio Lasiello, Cybersecurity Expert, Author, Poet, Screenwriter, and Playwriter

HACKER'S MOVIE GUIDE

2019 — Who You Think I Am — A 50-year-old divorced teacher (Juliette Binoche) uses a photo of a young, pretty blonde to create a fake Facebook profile of a 24-year-old woman after being ghosted by her 20-something lover.

2019 — You Can't Watch This — This independent documentary by George Llewelyn-John discusses freedom of speech and the online world. It highlights stories of five individuals who lose their access to social media and how that censorship affects them.

2020 — Archive — Roboticist George Almore (Theo James) is working to create a true human-equivalent AI, but when his focus turns to reuniting with his dead wife, Julie (Stacy Martin), he finds himself reaping Dr. Frankenstein-worthy consequences.

2020 — The Big Reset 2.0 — Every day, AI grows more functional, intelligent, and capable of completing even the most complicated tasks, but at what point does it become too much? In this documentary produced by Germany's international broadcaster, Deutsche Welle (DW), experts discuss the field's ongoing battle between risk and reward.

*"My Favorite movie is **Minority Report**. Somebody said that Artificial Intelligence is more dangerous than Nuclear Weapons. **Minority Report** is soon to be a realistic projection of what could happen to society should AI become controlled by the wrong entities."*

- Dario Forte, Vice President & GM at Sumo Logic

HACKER'S MOVIE GUIDE

2020 — Childhood 2.0 — What does it mean to be a child in the highly vulnerable digital age? Online predators, cyberbullying, and mental health take center stage in this documentary that delves into the real-life issues plaguing kids and parents today.

2020 — Cyberlante — After getting a job at an isolated hotel run by a cruel bully, Matt (Gavin Gordon) finds himself at the center of a battle between hacking for good and evil.

2020 — Enemies of the State — This American documentary film follows Matt DeHart, targeted by the U.S. government for having confidential documents alleging misconduct by the CIA.

2020 — Interference: Democracy at Risk — In 2016, many new threats against our democracy came to light, such as misinformation campaigns and voter fraud, all of which wouldn't be possible if not for the advanced, digital age we live in. This documentary urges viewers to make sure it never happens again.

*"**WarGames** is the classic 'Hacker Movie' for me. This is just as relevant to today's technology as it was in 1983 — Can We Play A Game !!!"*

- Michael Goldstein, President at LAN Infotech, LLC

HACKER'S MOVIE GUIDE

2020 — The Internet of Everything — This documentary discusses how the internet now invades every aspect of our lives, through things beyond computers and phones — such as garbage cans, refrigerators and city infrastructures. It also talks about the problems the internet has created and asks the question: will the future be a surveillance nightmare or an eco-utopia. Who will determine the outcome?

2020 — Julian Assange: Revolution Now — Overnight, Julian Assange went from coder to convict. This documentary tells the story of the founder of WikiLeaks and how his mission to entrust the public with some of the most private information made him an enemy of the United States government.

2020 — Kill Chain: The Cyber War on America's Elections — Produced by HBO, this documentary examines the rising number of tech vulnerabilities in the American electoral system, featuring an eye-opening demonstration of how secure electronic voting machines are by hackers at DEFCON, the world's largest hacking conference.

*"I liked the movie **Sneakers** because the 'black box' that could encrypt anything is another example of man creating technology that we cannot control properly. We need the best cybersecurity technology to keep our world safe, however, we need to recognize the risk of having next generation technology that could be controlled by the 'wrong' people."*

- Russ Artzt, Co-founder of CA Technologies, formerly known as Computer Associates

HACKER'S MOVIE GUIDE

2020 — KnowBe4: The Making Of A Unicorn — A Cybersecurity Story. How CEO Stu Sjouwerman built a culture of fun and a company worth $1 billion. With Chief Hacking Officer Kevin Mitnick. 23-minute documentary produced by Cybercrime Magazine.

2020 — No Safe Spaces — What does freedom of speech look like in the age of social media? In this documentary, comedian Adam Corrolla and talk show host Dennis Prager travel across America to explore what the future holds for the First Amendment.

2020 — Out of Dark — Ever wondered what it's like to be a spy? This eye-opening documentary invites cameras on a mission with a real-world intelligence operative, giving viewers an in-depth look into the top-secret world of foreign and domestic surveillance.

2020 — Password — A Saw-esque thriller in which an IT employee awakens to find himself tied to a chair, near a dead body and a laptop. Discovering he's been kidnapped, the employee must find a way out, but will the financial imbalance of India post-globalization get in his way?

*"**Skyfall**, an action great, remains one of my favorite movies and it is the first time we see Daniel Craig's 007 go more than fist to fist with a villain. Although the hacking scenes had Hollywood flair, Bond was probably as surprised as I was how his hacking counterpart was able to stay so many steps ahead."*

- Paul Spaulding, GM of Production at Cybercrime Magazine

HACKER'S MOVIE GUIDE

2020 — Screen Generation — Gen X, Millennials, Gen Z ... and then what? Following the generation dubbed the "Digital Natives," this documentary ponders what's in store for the children that grew up behind a screen. Researchers in the U.S. and Europe were interviewed.

2020 — The Social Dilemma — This documentary explores the dangerous human impact of social networking.

2020 — Tenet — In this action thriller directed by Christopher Nolen, an organization called Tenet recruits an unnamed CIA operative known as The Protagonist (John David Washington) for a mission involving "time inversion" to counter a future threat and stop World War III.

2020 — We Need to Talk About A.I. — Director Leanne Pooley takes a close look at the future of artificial intelligence and the impact it will have on the world, including how computers will have the capacity to design and program themselves as they continue to evolve.

*"I watched **The Matrix** dozens of times growing up and what really drew me in as a girl was Trinity — I'd never seen a strong, badass female character like that. Her character is intelligent, has the respect of her crew, and knows how to keep cool in difficult situations. I feel confident I'm not alone in being inspired by Trinity — I'd wager a bet that she's influenced a whole bunch of female cybercrime fighters out there!"*

- Hillarie McClure, Multimedia Director at Cybercrime Magazine

HACKER'S MOVIE GUIDE

2021 — Chakra — Military officer Chandru (Vishal Krishna) is one of fifty people who are robbed on Independence Day. After he discovers his most prized possession was stolen, Chandru joins forces with a police officer to hunt down the dangerous cybercriminal responsible.

2021 — Cryptopia: Bitcoin, Blockchains, And The Future Of The Internet — Filmmaker Torsten Hoffmann's eye-opening look into the world of cryptocurrency and the controversy surrounding it, featuring commentary from some of the industry's major players.

2021 — Dark Web: Cicada 3301 — After visiting the dark web, Connor (Jack Kesy), a gifted hacker, is invited to join the mysterious secret society Cicada 3301. He accepts and soon finds himself embroiled in an intense, high-stakes race against the NSA. Based on real-life events.

2021 —Dark Web: Fighting Cybercrime — The fight against cybercrime takes center stage in this documentary highlighting the security industry and its ceaseless determination to defend against the growing number of digital threats.

*"**WarGames**: This movie, even now, is still enjoyable, frightening and thrilling at the same time. Every time I think about how drones are gamifying war, I think of **WarGames**."*

- Laura Whitt-Winyard, CISSP, CISM, CISA, CRISC, Chief Information Security Officer at Malwarebytes

HACKER'S MOVIE GUIDE

2021 — Dear Hacker — What happens when your webcam goes rogue? The directorial debut of French filmmaker Alice Lenay, this documentary is a must-watch for anyone who's ever wondered about the inner workings of a webcam.

2021 — MY.DOOM: Earth's Deadliest [Computer] Virus — First seen in 2004, MyDoom is universally acknowledged as the worst computer virus of all time, having caused over $38 billion in losses. This documentary explores MyDoom's origins and chaotic run, all the while making an argument for just how essential white hat hackers really are.

2021 — Hacker Fairies — This short drama follows two white hat hackers on a mission to retrieve stolen photos of several women. Not long into the search, one of the women asks to learn more about hacking. Can she be trusted?

2021 — Hacker: Trust No One — When Danny cofounds a new cryptocurrency, he thinks it will make him rich. When he gets caught hacking, though, he and his girlfriend end up on a hit list instead.

*"One of my favorite films on this movie list is **Social Dilemma**. What I find fascinating about this movie is how many credible sources came forward to speak on the known dangers of social networking platforms."*

- Chris Morgan, Media Roadie at Cybercrime Magazine

HACKER'S MOVIE GUIDE

2021 — Love Hard — A columnist, who writes about her bad dating experiences, thinks she has met her perfect match on a dating app. When she flies across country to surprise him for Christmas, she learns she's been catfished.

2021 — The Perfect Weapon — Based on a best-selling book by New York Times national security correspondent David E. Sanger, this documentary explores the rise of cyber conflict as the primary way nations now compete with and sabotage one another. Directed by John Maggio, it features interviews with top military, intelligence, and political officials on the frontlines of cyberterrorism.

2021 — Silk Road — Directed by Tiller Russell, this is the story of the anonymous dark web market launched by Ross Ulbricht in early 2011. Ulbricht was jailed for life after an FBI operation shut down Silk Road.

*"**Hackers** remains a favorite of mine, because of the characters played by Jonny Lee Miller and Angelina Jolie. Recently, I was also intrigued by Juliette Binoche's character in **Who You Think I Am**, an unsettling movie that shows you how deceptive online relationships can be.*

- Di Freeze, Managing Editor at Cybercrime Magazine

HACKER'S MOVIE GUIDE

2021 — The Spy in Your Phone — The positive side of smartphones is that they keep us connected, entertain us, store data, and so much more. This documentary highlights the dangers, including privacy issues, how messaging and social media sites store our data and use it, how individuals and organizations can target us through spyware, and the concern about government mass surveillance. It also discusses what you can do to protect your data.

2021 — Twenty Hacker — Hex is a hacker who runs Better World, a "white hacker" club. When he discovers that black hackers have ruined his father's company, he enlists his club members to take them down, resulting in an inevitable showdown. Also known as The Hacker.

2021 — WANNACRY: Earth's Deadliest [Computer] Virus — This documentary examines how a computer virus that began as a small crypto worm in 2017 ended up infecting thousands of computers as ransomware. It describes the complex process that allowed it to be distributed in several ways and delves into a parallel story.

STEVE WOZNIAK INTERVIEW

Steve Wozniak, co-founder of Apple, joined Steve Morgan, founder of Cybersecurity Ventures, on the Cybercrime Magazine podcast in Feb. 2022 to discuss the history of hacking. This is a transcript of the episode.

Morgan:
Hi, I'm Steve Morgan, founder of Cybersecurity Ventures and editor in chief at Cybercrime Magazine. I'm here today with Steve Wozniak, the co-founder of Apple. Steve, welcome. Great to have you with us today.

Woz:
Hey, it's so great to be here. It's a joy in my life to talk about things that are important to me.

Morgan:
Steve, before computer hacking, there was phreaking. The "ph-" stands for phone, and the phreaks would reverse engineer the system of tones that telecommunications companies used for long-distance dialing. Recreating the tones for each number, at just the right pitch, could mean making a free call rather than running up expensive charges. In 1957, Joe Engressia (Joybubbles),

a blind, 7-year-old boy with perfect pitch, hears a high-pitched tone on a phone line and begins whistling along to it at a frequency of 2600Hz, enabling him to communicate with phone lines and become the U.S.'s first phone hacker or "phone phreak." Steve, I don't know if that's a good starting point. Did you know Joe, or of him, and what can you tell us about him?

Woz:
I didn't know Joe. I knew of him from that Esquire article in October of 1971, I think. No, it must have been before that. But no, it's kind of amazing because whether other people told him — he was close to people that worked with telephone company switchboards and he loved to visit them. To even touch the material meant something to him. So, probably somebody told him that you could whistle 2600 hertz. I can't do that high of an E. It's the second harmonic of the high E string on a guitar. But if you whistled that once you got a one. You whistle it long and it sees the phone line. Now, some internal piece of telephone equipment is thinking, I'm going to listen to tones to see where to dial. If you whistle once, it's a one, and two, it's a two. Like tapping the hook switch on a phone, you could actually dial phone calls. So, Joe Engressia used that technique where he

could just whistle calls. It's very hard to whistle two tones at once, which is what later came about to most of us blue boxers.

Morgan:
So, you mentioned the article in Esquire — before we go there, because I do want to ask you about that – the modern definition of the word hack, if I have it right, was coined at MIT in April of 1955, and the first known mention of computer hacking occurred in a 1963 issue of The Tech, which was also published by MIT. When did you first hear about phreaking or hacking and what was your earliest activity?

Woz:
I first learned about phreaking in the Esquire article in 1971 and summer of '71, just before I headed off to a year of college. But I heard about, I think, the word hacking in a later year in a book called Hackers, written by Steven Levy, who was a famous tech journalist, and it talked about the MIT Model Railroad Club and how they got access to a computer at night for free when you couldn't afford it — I mean, it's like, you could go through a year of college and get in today's dollars one million dollars worth of computer time — that just wasn't available to the public. And they'd sit

there and write programs on it for the sake of getting better at programming — and that's what they called hacking. And they would hack away and try to make the best version of a program or a routine that they could, and the other hackers around them would often compliment whoever wrote the best version. Somehow, it's a combination of simplicity and elegance and speed and performance, and everything got known for it, but basically, they were trying to find a way to do something better. Not that they were assigned it like a class project. It wasn't like a rule of life. Here's what you do. It's like just wanting to do it and seeing if you could do something a little bit better. It's that internal motivation and push. I don't know how to describe it because not everyone has it. Some of us grow up with this push, and I think most inventors have that kind of a push. See a problem. Maybe this would work as a solution — run it into the laboratory, try it out. But in the end, hacking is also a way to find little better ways. You weren't supposed to be able to do it, but it's like a shortcut. And it's not the evil form that the word took on in later years, when every newspaper convinced everybody that the word hacker only meant somebody trying to steal your goods and take over computers.

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Morgan:

So, Woz, you mention the article in Esquire — it was published in 1971. It was written by Ron Rosenbaum: "Secrets of the Little Blue Box." When you first read that article, what was your reaction to it? What kind of impact did that have on you?

Woz:

It was just grabbing me because it was technical people talking like technical experts and engineers. And in the article, they had this internal goal to just really expose Ma Bell to its flaws and help Ma Bell get better. And they didn't want to say they were just doing it to steal money. And they'd be kind of cautious, like they were being tapped when they talked to the ARCOS — so intriguing. And it said, "The Secrets of the Little Blue Box: An Interesting Story." Now, as I read it, this is fiction. To me, it was fiction. There aren't really these great telephone engineers running around and plugging into pay phones and setting up their own networks — are there? And then halfway through the article, I called Steve Jobs, who was my technical friend, and I started reading the article to him — strange, the people like Joe Engressia and Captain Crunch. Well, sadly, these oddball things. This was like stuff you read in a book or a movie, you know, fiction. And then

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I said to Steve at one point, the trouble is, they're giving away some real tone numbers. Like you said, 2600 — to dial a one, it would be a mixture of 900 hertz and 1100 hertz, or 700 and 900, and they didn't give a whole list. They gave a few examples, one, two and three, maybe. And I started saying to Steve, maybe this stuff's real. This article sounds too real. In later times, Ron Rosenbaum got a little pissed at me for thinking it was fiction, and it was totally investigative journalism. It was 100 percent real, but it triggered us. So, Steve and I ran to the one technical library that might have information about the phone company, and oh my gosh, we validated this stuff was real and we were shaking. All you have to do is put tones into a phone. And by that point in time, 1971, individuals could make tone makers and knowing the formula, passing it on to others, it was kind of a new way of making free phone calls. There were other ways in existence, like getting a hold of somebody's phone credit card or guessing a bunch of numbers, getting on a good one and then billing it to some credit card. They couldn't trace it to your number in those days. They couldn't trace a name. Everything was very anonymous on the phone system. You could put tones into a phone that would fool an operator in a payphone — beep, beep, beep, beep, beep — five quick beeps at the right tone,

and the operator would think you had put a quarter in when you hadn't. These are amazing times. The black box was just like two dollars worth of parts, and a phone call comes into your dorm room or whatever, press a button and go click, and it answers the call. And if you build the device the right way, you can still hear the person talking. But you're not being billed. The phone company thinks you disconnected.

Morgan:
So, Woz, there have been so many media stories about the blue box that you developed. And I've seen different accountings and they're not all the same. So I'd really, really love to hear the story directly from you. How did you build this blue box and how many of them did you sell? Is it true that the police shut down your operation? How is Steve Jobs involved? And I did read that, he said that had it not been for that experience together with you and the blue box, that Apple may not have been created.

Woz:
I know where Steve's coming from and I kind of agree. But back in those days, OK, now you knew that if you could create these tones, we were going from a world that was analog, where tone

makers had all sorts of electronic components hooked up in the right way and to make a tone. But if the temperature changed slightly, the tone would change slightly — it's hard to make it stable and accurate. And when Steve and I first discovered this, we ran out down to the local electronics store and bought a little part that we could make a multi-vibrator — a simple little tone generator. But we couldn't really stabilize our tone and measure it and get the right tones. We tried, but that's the nature of analog circuitry — you adjust something, you try it a little different. I went off to college the next day, and in there, very soon, I had a bunch of computer classes and I'd go down to use the computer on campus at Berkeley. And I, first of all, ran a bunch of numbers saying if we start with a crystal of one megahertz, or we start with a crystal of two megahertz, or one point five, or three point color TV frequency — which one has the simplest divisions that get close to the tones we need? I had decided to take digital parts, counters, and put a signal into them from the crystal oscillator — always the same tone, always predictable. And I was going to put that in, divide by the amount, if you push the five on the phone, it would divide it down, right? If you push to one, it would divide one side down to 700 hertz, the 700 hertz tone, the other side down to 900 hertz,

play them together. And so, I basically made a digital box that was always accurate on tone to what it was and what a trip that was. I was so proud of my box, showing it off, because all these other people had built the old electronics analog ones. This was digital and I had tricks in there that I never even equaled in my Apple designs, believe it or not. Knowing the internals of chips and being able to take the inputs of a chip and turn them into outputs, as well as the inputs, they were both inputs and outputs at the same time, and the output would turn the chip on. How could the chip generate something when it wasn't on? Oh no, I did amazing things, that was part of my life anyway by then, and I was just proud of this device, and it always worked.

Morgan:
Amazing. Now, did you sell them or were you giving them away?

Woz:
I was only showing it off. I was a shy person, but this brought me out of the shyness, and I could show it to the other people in my dorm — look at how this works, look what it does. And I'd pass on the folklore of the Esquire article. I collected other articles, I passed them around — one pole

vaulter up on the eighth floor got a letter from his parents one day wondering how come they hadn't been charged for two of their phone calls. He was using that little two dollar black box, which was in Ramparts Magazine that year. This is just a fun time in my life. And then one time, I was doing a demo in the dorms. I had a way to go around, do demos in a dorm for an illegal product, but not get caught ever. So, Steve Jobs was with me, and we'd drive back and forth up to the dorms, and blue boxing was one of our common things, just like Bob Dylan was. And he'd be in the dorm, he'd see all the interest, and say, we should sell them. I'd never thought of this, sell them? He says, how much does it cost you to make them? And back then, when you're buying parts, single quantity from these distributors who sell to companies, a little one dollar chip will be sold for, you know, 12 dollars, and I told them the cost to build this whole thing, including the case and the keyboard, was 75 bucks. And he said, we'll sell it for 150 —instantly came up with some number like that. I thought, you got to be nuts, college kids paying 150 bucks? Back then, that's like 1,500 bucks nowadays. That was a huge amount of money. And every single demo we did, we made them record it. They kept the recordings of maybe an hour and a half of me showing

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off all the tricks I could around the world with the phone. And every time we sold one, we sold the blue box for 150 bucks, so that was Steve Jobs' idea to sell it. He had no money. You know what? I didn't even need to go to college to have a job forever. I was so advanced in engineering and digital that money wasn't the issue for me, but it was kind of nice. And we sold onesie twosies for a while. And then a couple of students came and said they wanted to buy ten at a time, 20 at a time, and we made some money, and that I feel guilty about now, because I was careful. I believe the Esquire article that you're exploring a system. And if I called my relatives in Orange County, California, I paid the long-distance charge on my dorm phone number. I mean, I didn't use the blue box to call home for free, even though I could have. I only used the blue box to experiment and trick operators around the world into thinking I was an operator and knowing some jargon to extend the lines and to get where I wanted to go. That was my thing, but I sold them to other people that were using them just basically to cheat Ma Bell.

Morgan:
Now, what were the students doing with them when they would buy ten at a time?

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Woz:

I have no idea. Steve Jobs and I put a card in each of the blue boxes and it said, he's got the whole world in his hands. And if it ever came back with that card in it, I promised I'd fix it. So, they had a built-in warranty with that card, and one guy — I don't know, the cops probably set him up — he'd had a burglary in this house, he called the cops. So, now that they were in his house, they searched everything, including his car, and they found a briefcase with all of my blue boxes in it. And now, every time a celebrity got busted in L.A. with that little card in their blue box, they went back to Leonard, and I heard about them. Like, the woman that played Mannix's secretary got busted, or Ike or Tina Turner, one of them, they got busted with my blue box. So, I was a little bit, you know, proud of that as a young, young kid. And what they were doing with them, I think it was making themselves a little bit impressive with a business to sell you a device that can make you free phone calls. And they did. They sold a lot of them.

Morgan:

Is it true, Woz, that the police shut the operation down, or no?

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Woz:
It's not true that the police shut down my blue boxing, or I ever got in trouble for blue boxing — no. You know, you're a young student in college, you've never even had a kiss. I'd put on a lineman's handset that I owned, and I'd go over to the girl's dorm to show them, here's how you can hook up to a phone line in your first floor of your dorm, and then you can listen in on other rooms, like the house mother. And oh boy, the house mother went by, she was not too happy, she called the police. So, they arrested me for that, but it was just basically showing off a lineman's handset that I knew something about phones to girls. And I was in jail and out of jail in three hours, and pleaded guilty to some little minor thing. But that was not blue boxes. I think, there were things that were said to me, that I believe they were on to me or close to onto me, for the blue boxes. Probably the fact that I never made any free calls without paying. Maybe on the school phones. Maybe that's one reason I barely squeaked by. No, I was very lucky.

Morgan:
It's interesting. We've interviewed quite a few people, and I think of, I don't know, just to bring one name up, Kevin Mitnick. I don't know if you know Kevin?

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Woz:
Very well.

Morgan:
Ok, so Kevin, as far as I'm concerned, there was no malice. He just was extraordinarily curious, probably pushed the envelope too far. But there are people who make up the history of hacking where they were just brilliant. And then at some point, somewhere along the line, hacking changed — or, at least for a lot of people it did, because we still use that word now to describe cybercriminals. Back in the day, were you exposed? Did you know of any people who maybe were hacking with malice or phreaking with malice?

Woz:
For computer hacking? No, I didn't. As a matter of fact, I have never really hacked — like, tried to go in and crack an operating system or something like that. The closest I came was a friend of mine was at Beverly Hills High School, and he was a phone phreak that I'd met on a phone network. And they ran their programs on computers there, they had some computers there — not when I was in high school — and it was an HP something model F computer, and I asked my friend John Draper, and he or somebody he knew said,

oh, you just type in a simple, little basic program, and then run it. And it crashed the computer, and they had a backup and it crashed the backup, and they had a backup and it crashed, their last backup. And finally, I guess they called HP, and found out — oh, got to move up your operating system to G. Now, that was a little bit like hacking, but I never hacked myself. I did get other people's passwords three times, but it was really for my own interest in pranks. And one was when I had a little terminal design to get on the ARPANET. Now, today's internet has billions of terminals. The ARPANET had six computers — MIT, Stanford Research Institute, UCLA, UC Santa Barbara, Utah, etc. And oh my gosh, I had to be on this new thing. And I built a terminal digitally that would connect through my modem, my design. I built a modem — I didn't really design the modem from scratch — I copied a data sheet, but everything else I designed from scratch. And I was on the ARPANET, and then there was a local outfit I discovered called Call Computer. You could get a little account and log in with your terminal and call this local time sharing outfit, and John Draper had an account there — Captain Crunch. And he was in my apartment, and I watched him type his password — he didn't move his hands at all. And with his keys kind of on the home row, he

went click, click, click, click — four keys. And so, Steve Jobs and I went down to Call Computer, and we went to his name and tried to guess his password. The second password I guessed — "W. E. R. E." — was his password, and we saw he had his resumé in there. We were thinking of adding his arrests to it, but we didn't. We didn't. We didn't. We didn't go the bad way. We were doing stuff for fun, really. And one time one of my stepchildren had a website in the house network — his name was Adam, and his password was Adam. So, after I discovered that, I went up to his mom — I'll play pranks on anybody — and I told his mom, maybe we can crack his password. And I showed her how to try, and she thought she cracked his password. I said, OK, now do this — by the way, I had moved all of his folders way out of sight, where he could never find them, his system folders, his control panels and all that. I'd made it so impossible to search around in blank space and never get back. I had his mom create a folder right on the desktop that said, "From mom," and he was livid. And the only other time was a guy was trying to hack into my system. I ran classes for eight years, and I gave all the students phone in access, so they could get on AOL. It's easy now. It was really hard. This was back before there were laptops even, and they could phone in and get on the internet.

I saw a guy one day, he had a server set up called SENDMEPORN@KILLERJUPE@AOL.COM. And, what the heck? Send me porn? We have school stuff here, and I searched around, none of our computers were like that. I said, oh, he might have phoned in on one of my students' accounts and come in. So, I went to AOL, and his name was KILLERJUPE@AOL.COM.

Morgan:
Right.

Woz:
I tried password, well, about the second password I tried was JUPE — J. U. P. E. Oh my gosh, I was in his account, and he wasn't one of my students, but he was using one of my student's accounts. So, he was hacking his way in. But meanwhile, I got in his account. I had access to his whole computer. It was like we were on the same Apple Network together. So, I went in, put on some of these phony files that when you try to quit, it says erase the hard disk, and the only answer is yes. And I put his account into child mode and saw that he was doing things like trying to contact some 14-year-old girl in Santa Barbara to have sex, and we kind of messed up with his life a little bit there, and eventually got his account disconnected. Those

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are my three times I ever got someone else's password. Well, you know, if I saw some code and I thought, I wonder if there's a flaw in here? I would want to play with it, and discover it, and try to see what it could lead to. Nowadays, you know, there's just, millions and millions of hacking events have occurred by different methods. There's nothing that's absolutely guaranteed safe.

Morgan:
So, Woz, you brought up John Draper a couple of times — Captain Crunch. For anybody who doesn't know who John is — and there's a lot of people who are going to be listening to this and just fascinated, and want to know the history — tell us about John.

Woz:
John was in the Esquire article. He was known as Captain Crunch because the Captain Crunch whistle played that special tone — *whistle* — 2600 hertz — that would seize a phone line and whatnot. So, Captain Crunch was one of the guys, and then Steve Jobs and I, we wanted to meet him. Steve heard that he had done a radio station interview on KTAO in Los Gatos, where I live now, and we called the station, but we never got to him. And then I was sitting in my dorm one day,

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I'm spreading lore around, and I've got my wall covered with printouts of articles about phone phreaking that year. And a friend came by, and I'm telling him that stuff about blue boxes and Captain Crunch, and he says, oh, by the way, I know who Captain Crunch is. That's what he said to me. The FBI hadn't caught Crunch yet, and this is my friend Dave Hurd, and he said, John Draper used to work at KKUP, and so did my friend — that's how he knew him — in Cupertino. Steve and I, next time we were back home — in our houses, not the dorm — Steve picked up the phone and called KKUP, and he said, is John Draper there? They said he dropped out of sight right after the Esquire article. We had the real guy. So, we gave our phone number, and within ten minutes, Crunch called us. He made an appointment to come to the dorm, walk into the dorm where I'd made him such a hero, and he was going to come to our room, you know, and share a whole bunch of phone phreaking stories and everything. So, we actually met the real Captain Crunch — not quite living up to the article that he was a real woman's man, and suave, and all this. He kind of was missing teeth and didn't look like he'd showered in ages, and I wanted to see his van full of all this phone equipment, you know, that directs calls all over the world, networking equipment. They

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open up his van and it was empty, except there's a radio antenna inside, and he got a blue box out of there. He had one blue box where you could push some buttons — beep, beep, beep, beep — and it would automatically dial numbers, which encouraged me to make my box. I had a button that would dial one number on mine, and, beep, beep, beep, called a number in Los Angeles called Happy Ben — old guy singing, "Happy Ben is here again. Good to see you. Happy, bye, it's Happy Ben here." And I just loved that. It made me laugh every time I heard it, so, I would be able to dial call that on my blue box from a payphone. Anyway, we had a lot of experiences with Crunch, and he told us a lot of things going on in the phreaking world, and stories about how to seize lines by putting little taps and clicks in at the right time. He could go to a payphone in some of the cities in San Jose, and after a certain hour, instead of dialing 411 customer assistance or whatever, 611 customer assistance or 411, which was information, instead of dialing that, it would dial a number over in San Jose. That would then make the call to information if it was a 555 number or whatever — it wouldn't dial itself — and while it was dialing, he would add extra taps on the hook switch of the payphone, and he could call numbers, and did it in front of us — to New York and places. He, one

time, down at Call Computer, made a phone call right into the FBI, and we listened, as the FBI were talking about an in-progress case and going out to pick up a certain person. And this was when the newspapers, the police were denying there was any way to do that sort of thing. Oh, there was. I found him as an interesting person. Steve Jobs was a little scared he was going to get us in trouble and avoided him, but I loved meeting up with him every now and then to hear the latest of all this imaginary fanfare you never would think would exist in the technical world.

Morgan:
Now, how much fun were your phreaking days, Woz? And I'd be curious, you know, the same for Steve Jobs, compared to the immense success the two of you had when you started up Apple and that company took off.

Woz:
Well, I'd had a life of actually building, designing things, right and left, and they were all fun and the phreaking was sort of the highest level at the time. And it was really one year, it was one year of college, and by then, I'd done everything you can do in it. Remember, I'm just trying to explore and see what you can do, not try to make free

calls, so, I didn't do it anymore. But yeah, that sort of excitement stuck with me forever. I wanted it forever. I wanted to turn digital devices into something exciting that you could show other people at the very least, or do useful things with, and when we're making many of those blue boxes, I did design and I would solder the parts in myself. But then, Steve Jobs went and did something on his own. He laid out a little PC board for it, so you wouldn't have to connect all the wires. I mean, he wasn't really a wiring person, as much as then, he made the PC board. Well, if you look at our Apple history, we started out with an idea and a design, and Steve took the step that what we'll do, the way we'll start a company, we'll make a PC board for 20 dollars and sell it for 40. And that was to be the whole start of Apple. But it was really the excitement of having done this thing to ourselves, to know that we had something valuable to others, and finding ways to sell it. I think that was an important point in Steve's life because he wanted to find a way to be important in the world, but he didn't have any academic or business background. And how do you do it? You got to have a company someday, so, kind of like my computer designs were that. It was the same as the blue box. It kind of gave him a way to put some sales expertise into use and talk other

people into things, and make money. He had zero money. I had a job as an engineer. That was a big difference between us.

Morgan:
And do you think he'd still enjoy reminiscing about that? Did he, before he passed away? Was that an important time for him and did he have fond memories?

Woz:
It's interesting that you ask that because as he got near his death, I'd have a few phone calls in the last couple of years of his life and even one right before his death, and he absolutely wanted to reminisce about those times, and did you think they'd ever take us here? And he remembered the fun we had. There was a Steve Jobs zero before any Steve Jobs you read about, and that was the Steve Jobs I knew for five years before Apple — the fun things we did, the pranks, the blue boxes, concerts, you know, normal young kids, fun things — and he did reminisce to it. And even the blue box, every bit of that blue box story, that was like the first time he found that you can make money if you have a good product, and I'm very glad for him. He was a wonderful person, did a lot for me in my life.

STEVE WOZNIAK INTERVIEW

Morgan:
Well, Woz, listening to you, I'm just so thankful to have you on. You cleared some things up for us, just a great accounting of your phreaking days. Before we let you go, anything I didn't touch on that you think people would want to know about?

Woz:
Almost every time you hear about hackers, they're usually just like I was — some person who discovered something, a way to do something and really just wants to get it cleaned up, rather than take advantage of it and sell it to political parties, or companies, or things like that. Those are the bad ones, but most hackers are really white hat hackers that want to be good and want to expose the black hat ones.

Morgan:
Well, Woz, thank you so much for coming on with us today. I hope you'll keep in touch.

Woz:
Well, thanks for having me!

Morgan:
Woz is a tough act to follow. But, we do want to share a short clip of his partner, Steve Jobs from

a 1994 interview with the Silicon Valley Historical Association. Jobs talks about creating the blue boxes with Woz, and how they started Apple Computer. Let's listen.

Jobs:
I actually figured out how to build one. We built the best one in the world, that was the first digital blue box in the world, but it was the magic of the fact that two teenagers could build this box for 100 dollars worth of parts, and control hundreds of billions of dollars of infrastructure in the entire telephone network in the whole world from Los Altos in Cupertino, California. And that, if we hadn't have made blue boxes, there would have been no Apple.

Morgan:
I'm Steve Morgan, founder of Cybersecurity Ventures and editor-in-chief at Cybercrime Magazine. Joining us today with Steve Wozniak, the co-founder of Apple. You can keep up with all of our media at cybercrimemagazine.com.

STEVEN C. MORGAN

Steve Morgan is the founder of Cybersecurity Ventures, editor-in-chief at Cybercrime Magazine, and executive producer at WCYB Digital Radio aka Cybercrime Radio. Steve is a well-known cybersecurity researcher, publisher, and journalist. His annual reports on cybercrime and cybersecurity contain de facto standard statistical information featured and quoted by major media outlets, academia, governments, vendors, associations, and experts globally. He is co-author of the books "Hacker's Movie Guide," the complete list of hacker and cybersecurity movies; and "Women Know Cyber," a profile of 100 fascinating females fighting cybercrime.

ABOUT STEVEN C. MORGAN

"I'm proud of the 23-minute documentary we produced, which is in the Hacker's Movie Guide. 'KnowBe4: The Making Of A Unicorn' (2020) is a cybersecurity story that tells how CEO Stu Sjouwerman built a culture of fun and a company worth $1 billion. We filmed their Chief Hacking Officer Kevin Mitnick, who is also known as the world's most famous hacker, in our studios, which was a special day for us."

CONNOR S. MORGAN

Connor Morgan is a researcher and media production team member at Cybersecurity Ventures. He compiles and curates cybersecurity content for the editors at Cybercrime Magazine. His projects include cyber and crypto experts, companies, criminals, victims, books, films, events, and schools globally. Connor is co-author of the "Hacker's Movie Guide," the complete list of hacker and cybersecurity movies. He is also on special assignment for our popular "History of Hacking" series. Connor studied criminal justice at Suffolk County Community College and St. John's University in New York.

ABOUT CONNOR S. MORGAN

"Throughout my research for the 'Hackers Movie Guide' I found it surprising that the movie that dates back the farthest is 1984, which was released in 1956. The movie is based on George Orwell's 1984 book that was published in 1949. Both the movie and the book have similar storylines, they take place in a fictional totalitarian state and they often make the reference to 'Big Brother' and how they're watching every move everyone makes. But a person attempts to combat the system under tyrant control."

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HACKER'S MOVIE GUIDE

STEVEN C. MORGAN & CONNOR S. MORGAN

"When young, we are less wealthy or powerful than most adults. My whole life has been wanting to be like movie protagonists, who are younger, poorer and weaker, having to overcome Goliath, but having brains that think outside of the rules. I have always been for the young and powerless, the consumers vs. the producers. This is almost always the theme ascribed to hackers in movies. The young hackers use their brains for good and fairness. We all take their sides in these movies. They are the good guys that all of us with brains want to be."

- STEVE WOZNIAK
CO-FOUNDER OF APPLE

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