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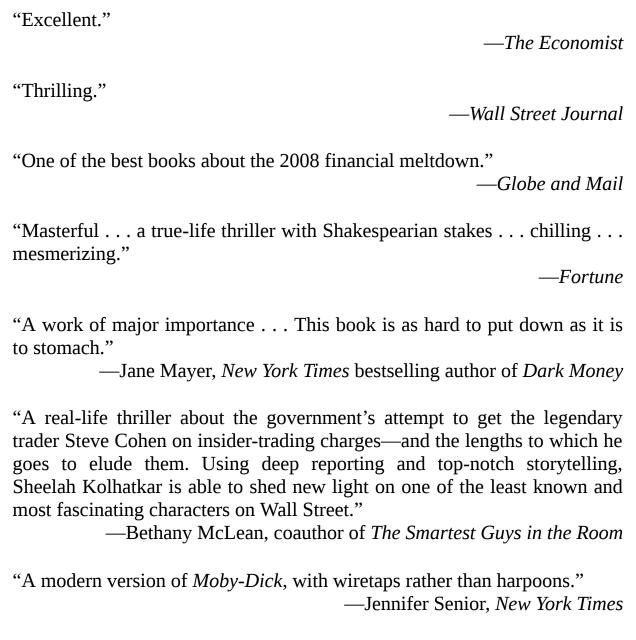
AN INSURGENCY ON WALL STREET



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NEW YORK TIMES BESTSELLING AUTHOR OF BLACK EDGE

PRAISE FOR *BLACK EDGE* BY SHEELAH KOLHATKAR



OceanofPDF.com

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END

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his is a true story. Nothing is invented. Dialogue and digital communications are quoted from interview transcripts, published reports, congressional testimony, and archived comments on YouTube and Reddit.

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eith Gill always liked money. As a kid, he collected discarded scratch-off lottery tickets, hoping that a very unlucky someone had lost a winning number. Growing up in Brockton, Massachusetts, a middle-class Boston suburb with modest houses fronted by tidy lawns and old oak trees, it wasn't obvious to him how one could amass a sizable fortune, enough to become part of the 0.1 percent. Gill's father was a truck driver and his mother a registered nurse. When Gill graduated from Stonehill College in 2009 with a degree in accounting, he became the first in his family to earn a four-year college degree. His timing was both out of his control and unfortunate, though, and he found himself released into the job market during the Great Recession, the long-term economic malaise caused by the financial crisis of 2008. It was an unforgiving climate for new graduates. Gill worked, briefly, in the operations department of an office-supply company based in Brockton, but his true passion was for investing. He joined a start-up based in New Hampshire that was focused on building software for analyzing and researching stocks.

The job didn't pay well—he was making around \$40,000 a year to build investment software—but it taught him how to dig into financial statements and understand the true value of stocks. Becoming familiar with the details of a company's financial performance taught him to see through the hype of the financial press and view the swings in the market according to shadow activity you could perceive only if reading between the lines.

In 2016 Gill married his girlfriend, Caroline, but the start-up didn't work out, and soon Gill was again unemployed. He came to the same conclusion as many young adults of his generation: that it isn't realistic to build one's wealth through a salaried job, that it might well be impossible. His hunch was bolstered by the work of Thomas Piketty, the French economist and expert on income inequality, who argued in his bestselling book *Capital in the Twenty-First Century* that invested money was likely to

appreciate much more rapidly than income in the future, which would only increase the gap in wealth between those who already had money and those who didn't.

Gill's interpretation of this was that the path to becoming rich was to make smart but aggressive investments in the stock market, the way professionals did. Given the small amount of capital he had to play with, it would require taking risks, putting almost everything he had into an idea he was confident in. He spent the next two years trading, trying to grow the small amount of savings he and Caroline had amassed. In 2019 Gill took a job as the director of financial wellness education at MassMutual, an insurance company based in Massachusetts. His role was to develop financial education products that MassMutual could offer to its clients. It was the first time Gill had ever been paid more than \$100,000 a year. He and Caroline bought a three-bedroom house and gave birth to a baby daughter. They felt hopeful about the future.

Professional investors, such as those working at hedge funds and investment banks, had most of the edge when it came to stock trading, but the internet had ushered in a new era for small investors: social media channels such as Reddit, Twitter, YouTube, and others made it possible for individual traders to connect and share ideas and cheer one another on, while online brokerage firms such as E*TRADE had made it cheaper to trade. Gill made use of all these tools. He built spreadsheets to track hundreds of stocks that he was interested in and studied filings companies made with the Securities and Exchange Commission (SEC), preparing to make savvy purchases when opportunities arose. It was by doing this that he noticed, in the summer of 2019, that a well-known fund manager named Dr. Michael J. Burry had been buying shares of a struggling video-game retailer called GameStop (GME).

Burry wasn't just an average investor. The Michael Lewis book *The Big Short* had elevated his story into the public consciousness. The movie based on the book was nominated for five Academy Awards: Burry made more than \$1 billion betting against the subprime mortgage market prior to 2008. He was brilliant and eccentric. He had also suggested that he was on the autism spectrum. In many ways, Gill approached investing like Burry did: Burry conducted obsessive amounts of research, digging through obscure financial data and scribbling formulas on a whiteboard in his office before committing capital to a particular trade idea. Over the previous few

years, Burry had watched the leadership of GameStop make one poor decision after another.

The company had failed to respond to the transition of almost every aspect of life and commerce to the internet. Gamers play through the cloud and online servers, and most games are now purchased with a mouse click. In 2014, when Amazon bought the online gaming platform Twitch, which went on to explode in popularity, GameStop had embarked on what Burry thought was a disastrous path of buying wireless retail stores. As the rising world of online gaming passed GameStop by, its stock price steadily declined. Burry felt the company could improve. In June he wrote a letter to GameStop's board, offering some unsolicited advice. He noted that the company's stock price had fallen from above \$15 at the beginning of the year to less than \$4. "The numbers are striking and demand action," he wrote. "Shareholders do not have faith in current management and have not been inspired by new leadership policies."

He noted that GameStop had \$480 million in cash that it wasn't putting to good use. He then employed a common hedge-fund tactic to try to pressure a company to drive up its stock price, urging the board to use the cash to buy back GameStop shares. All of this would directly profit Burry and his fund.

Many investors followed what Burry did; when one of his investments became public, it usually moved the stock price as others copied him and bought whatever he was buying. When Burry's letter to the board was released, one of the people who took note was Gill.

Keith Gill had played video games since he was a child, and he knew GameStop intimately. He agreed with Burry and thought that, in spite of its problems, the company still had a lot in its favor. GameStop had sixty million customers signed up for its loyalty program, and new gaming consoles were expected to be released the following year, which Gill expected would improve sales. Like Burry, Gill felt that the company had done a terrible job of responding to the rise of the streaming economy. So many investors had convinced themselves that the company would go bankrupt that sixty-three million of GameStop's outstanding shares had been shorted, which meant that investors had borrowed the shares and sold them, hoping the price would decline so they could buy them back to repay their loans.

GameStop was in fact the most heavily shorted stock on the market, with short interest close to 100 percent of its outstanding shares, according to data released by the SEC. This only added to Gill's sense that GameStop was underappreciated. He thought it had the potential to become one of the dominant brands in the \$200 billion gaming industry, and once investors recognized this on a large scale, the stock price would jump up to reflect its true value. That same summer, as Burry was buying GameStop stock and preparing to publicize his views on what the company's managers should do, Gill purchased call options, a contract that gives the buyer the right to purchase a hundred shares of stock at a future price on a set date and that represented an expectation that the price would rise, on GME. He didn't have a lot of money to commit to the trade, and it was a small position. But he would make a healthy profit if the short sellers were wrong and the company turned things around.

Professional investors like Burry sometimes play the role of storytellers. Part of their goal is to convince others in the market that they're right, which creates momentum and causes the value of whatever stock they're talking about to go up (or down, if they're short). Although the SEC has rules prohibiting market manipulation, the phenomenon of major investors boosting their stock positions in the press isn't considered illegal for some reason. Going on television investing shows and talking up their investments isn't an option for most regular investors, but there is another way: the internet, with its ecosystem of social media platforms where traders discuss stocks and debate ideas in novel languages with lingo like "Diamond Hands" (to hold on to an investment through periods of turmoil) and "YOLO," communicating through visuals as much as anything. Doctored photos, video clips, digital collages, and what you might call raw punning—all together known as "memes"—are a big part of the landscape.

One of the most popular places for this ongoing conversation is the subreddit message board on Reddit, then called r/wallstreetbets. During the next few months, this emerging new digital language became increasingly powerful, with internet meme wars dominating many investing conversations as well as political ones. They were used artfully by former president Donald Trump, who began his presidency with one memetic slogan, "Make America Great Again," and ended it with another, "Stop the

Steal." In the meme world, subtlety, nuance, and contradictory evidence tend to be lost.

Gill's Reddit user name was DFV, which stood for DeepFuckingValue. In September he posted a screenshot of his portfolio on Wall Street Bets. It showed that he had around \$50,000 worth of call options on GME, with an expiration date of January 15, 2021, and a strike price of \$8, which meant they would be "in the money" if the stock rose above that price in the next year and a half (the stock was currently around \$4). He didn't explain himself other than to say, "Hey Burry thanks a lot for jacking up my cost basis," followed by: "YOLO."

Wall Street Bets users tended to haze newcomers with insults and verbal abuse. Gill's first post drew some derisive comments, which Gill responded to with a calm self-assuredness. "Holy shit bro, what made you drop 53K on gamestop?" someone who went by Techmonk123 wrote.

Gill replied, "The fact that it's worth quite a bit more than \$8/sh and there are numerous catalysts that could trigger a reversion to fair value over the next 18mo."

"You're gonna have a hard time dumping these when the stock drops below \$3 this week," another poster, who went by LincolnAtTheTheater, wrote.

Gill responded: "Think so? Bet so?"

"Hahaha," someone else wrote. "RemindMe! if this stupid fuck lost it all in 1 week."

For the next few months, Gill, as DFV, continued posting his GME updates, sometimes showing small changes in his position. GameStop's stock price didn't do much, inching up and down within the \$3 to \$4 range. But as Gill became more familiar with the new medium he was operating in, his communication style evolved. He started to embrace the idiosyncratic language of Wall Street Bets. The sarcastic or mocking comments directed at him continued, but his responses became wittier and more confident, with untold memes: links, animated GIFs, or second-long clips of Will Ferrell, Gene Wilder, or the Muppets standing in for the written answers.

"Zoom out . . . zoom way out," wrote one poster, who went by brutalpancake. "This company was \$55 a share in 2014. It's down 90 fucking percent over one of the strongest market runs in history. I have no idea what you see here." Gill replied with a link to a clip of a ridiculous-

looking Jim Carrey in *Ace Ventura*, saying, with cartoonish exaggeration: "*Alll righty* then."

This continued until early April 2020, when Burry revealed that his fund, Scion Capital, had amassed more than two million more GameStop shares, giving him a 5.3 percent stake. The news sent the stock up from \$2.80 to nearly \$5 within a few days. This gave Gill even more certainty about his position. The following July, Gill introduced his own YouTube channel, called Roaring Kitty, with a two-minute video. The parameters he outlined were ambitious. "To kick things off, I'm thinkin' I'll live stream after hours every Monday, Wednesday, and Friday from seven to ten p.m."

On-screen, Gill had a shaggy, dorky charm. His dark-brown hair was tucked under a backward baseball cap, and his blue-green eyes gleamed. Facing directly into the lights, his face glowed, and as he spoke, his thick eyebrows danced up and down, occasionally crunching together. He looked, by turns, like a pirate or a rock star, but he spoke in a disarmingly soft voice, as if he were talking to a baby. He said he didn't know for sure how his streaming schedule would work in the future: maybe three times a week was too much? "Maybe there's going to be no one tuning in," he went on. "So this is silly." Toward the end of the video, he read some of the initial comments he said he'd gotten on the first few videos he'd posted. "Really cool spreadsheets, NERD," he read, smiling good-naturedly. Then, "Shut up, grandpa," and "Do less."

Gill had a wife and a young daughter at home, but, incredibly, he still found time to spend hours at a stretch, sometimes several nights a week, broadcasting himself flipping through his spreadsheets and googling different bits of information, free-associating on GameStop's prospects and, occasionally, those of other companies. In late July he pulled up a chart showing GME's stock price declining steadily and then reaching a plateau. He noted to his viewers that the short interest, or the amount of stock that had been sold short, was around 100 percent. "The short interest isn't a fundamental part of this thesis, but you need to acknowledge it. It's out there," Gill said. "I'm not betting on a short squeeze, but it seems like something where it could take place?"

He thought the upcoming sales of new gaming consoles would help GameStop, and the company could even get taken over by a private-equity firm. "I don't know how anyone could be short GameStop at four dollars. That's just really, really risky!" he went on. "And yet you see a huge short

position. I see this and think, what are you thinking, shorting GameStop right now? You're pricing in a very apocalyptic scenario for GameStop, and I'm just not seeing that."

Short selling can be explained through a hypothetical example. Let's say your friend has a 2019 Tesla Model 3, and you ask to borrow it. But instead of driving it, you sell it to someone else for \$65,000. Then you wait, because you believe that Tesla is going to introduce a new version of the Model 3, which will drive the price of the 2019 down; once the 2022 comes out, the 2019 Model 3 price drops to \$55,000. You buy one for that price and then give the car to your friend, having made a \$10,000 profit in the process. With real short selling, a stock is borrowed by calling the stock loan department of a brokerage firm, which finds the shares from someone who owns them. The investor then sells the shares in the market, with the hope that the value will decline, at which point they can buy them back and repay the stock that was borrowed. It's a technique that's typically available only to professional investors because it's risky: if the stock price goes up instead of down, the short seller loses the amount of the gain, which theoretically could be limitless. So much GameStop had been shorted that it raised the question of how so many investors could have borrowed so many shares; surely 100 percent of GameStop's shareholders hadn't agreed to lend theirs out? Without securing stock to borrow, short selling is called "naked shorting," and it's prohibited by SEC rules. If naked shorting occurs on a vast scale, it has the potential to put so much downward pressure on a company's stock that the company collapses.

On August 14 a hedge fund called Melvin Capital filed its 13F statement with the SEC, reporting all the fund's long-equity holdings. The fund had bought puts, or options, giving the fund the right to sell shares in the future, which would increase in value if the stock went down. Melvin had almost \$15 million worth of puts on GME, as well as puts on a handful of other companies, including Bed Bath & Beyond, Best Buy, and the Kroger supermarket chain. The filing provided only a partial view of what Melvin's full positions were, so it was unknown what additional short exposure the fund had to GME.

After that, the news surrounding GameStop moved quickly, and Gill could barely keep up. In September Ryan Cohen, the founder of Chewy.com, an online pet-supply retailer, revealed that he had bought almost 10 percent of GME's stock and planned to pressure the company to

make improvements. A few weeks later, a Wall Street Bets member posted a three-minute meme based on the HBO miniseries *Chernobyl*, titled "GME Squeeze and the Demise of Melvin Capital." The poster, Stonksflyingup, explained the dynamic of a short squeeze simply: once the first set of short sellers starts buying back their stock, their purchases push the price up, which in turn creates more losses for the remaining shorts, who in turn rush to buy, leading the price to skyrocket. If naked shorting has occurred, the dynamic is even more exaggerated, and the shorts become trapped, unable to buy their stock back because the shares never existed. "It destroys and ruptures a series of high net-worth clients," the meme read. "GME share price is now a nuclear bomb."

The morning of January 26, 2021, began, for Jeffrey McShane, as most other mornings had in the year and a half since his arrival, virtually, to Boston University (BU), as a PhD candidate in the space-engineering program. He rose around 8:00 a.m., checked his stocks on his phone, and let Frank, his white shih tzu, outside. Then he drank a glass of Great Value vegetable juice, the generic version of V8, and left to take a COVID-19 test before going to the engineering lab, one of the only places on campus that was still open. He spent the day working on designing a sunshade for a NASA telescope that was part of his graduate research, stopping only to pick up a chopped salad at Subway for lunch, which he ate at his desk. Around 5:30 p.m., after the handful of other students working in the lab had left, McShane did something he'd never done before: he logged in to his brokerage account from the computer in the lab, rather than waiting until he got home. He felt a bit of urgency about what he was about to do. He had learned of AMC Entertainment Holdings (AMC), the movie-theater chain, partly by watching investing shows on YouTube, where he found out that the company had a high proportion of short interest in its stock, meaning that hedge funds and other investors were betting that it would go down. McShane thought that the company would start to perform better once the pandemic subsided and that the hedge funds were wrong. He didn't realize at the time that he was wandering into what came to be called a "meme stock event," which would affect AMC, GameStop, and a handful of other stocks.

Most of the diversions of university life—the bustling campus, chance encounters with other students in the library, and nights out in bars—had been replaced by a stripped-down existence that revolved around virtual graduate seminars, visits to the engineering lab, and furtive trips to the grocery store. McShane lived in graduate-student housing near Fenway Park, and the university had turned his building into a quarantine site for students with suspected COVID exposure, so he felt anxious every time he left his apartment and hurried through the lobby. "There were times when you weren't even allowed to go outside," McShane said recently. "There were curfews. You were told to stay in your home. It was full lockdown. So what are you going to do, as an adult? You have to be on your computer."

Sitting alone in the engineering lab, McShane first bought one hundred shares of AMC at \$5.40 and then, as the stock moved higher, eight hundred more at \$5.44. In order to buy more, he sold two exchange-traded funds that he owned, UVXY, which tracked volatility in the S&P 500 stock index, and SQQQ, which tracked the NASDAQ. He kept buying AMC in spurts until he had accumulated just over two thousand shares at an average price of around \$6. When he got home, he texted his on-again, off-again girlfriend, Marie, who he often chatted with about stock picks: **Hey, I went big into AMC**.

The next morning, AMC shares were "going crazy," as McShane put it, and he sold most of what he owned for around \$15.75, earning a \$14,000 profit. He and Marie had plans for that night, and he spent the day in the lab, willing the hours to pass quickly. They met at one of the only bars that was open, the Yard House, where Marie had a margarita and McShane a Jack Daniel's and Coke. They ate some nachos and chicken wings, paid the check, and walked back to McShane's apartment, which was around the corner. On the way, Marie told McShane about an online message board on Reddit called Wall Street Bets, where, Marie said, she never posted but spent hours reading other people's posts, which made her a "lurker." Everyone on the board was obsessed with a struggling video-game retailer called GameStop that had been shorted like crazy by a group of hedge funds, just like AMC; she showed McShane her phone, where hundreds of posters on Wall Street Bets were making pledges to buy GME, to try to drive up the price.

When they reached McShane's building, he went inside, then came down and snuck Marie in through a back entrance, because he wasn't supposed to have visitors due to the quarantine. While she watched TV and played with Frank, McShane scrolled through Wall Street Bets, mesmerized. People were posting memes—doctored images and video clips illustrating things going on in the market. There was one that juxtaposed pro-GameStop lyrics to the tune of a sea shanty from the 1800s; another showed subtitles over a clip from the movie 1917, showing actor George MacKay playing a British soldier (subtitled a "new investor" putting his life savings into GME stock) running through an exploding minefield populated with obstacles such as "short sellers," "global pandemic," and "parents worried about you," as he tries to deliver an urgent message to a British colonel. "It had this 'fighting against the bad guys' feel to it," McShane said. "It had me at *hello*."

Most of the activity on Wall Street Bets in late January revolved around a poster who went by the Reddit handle DeepFuckingValue, who had inspired almost everyone on the message board to fixate on GameStop. DFV, who also hosted his own YouTube investing show under the name Roaring Kitty, had been holding a large investment in GameStop shares for more than a year. There was an air of mystery around DVF; others on Wall Street Bets knew relatively little about him, other than that he spent hours each week streaming himself wearing a bandanna, riffing about stocks. The GameStop stock price had crashed, but DFV believed it would recover; the company would likely hire new management and improve its business prospects, transforming itself from a dying retail chain into an onlinegaming powerhouse. He had also pointed out, almost in passing, that almost 100 percent of GME's stock had been sold short; it was such a high percentage that it should have been physically impossible.

Many of the posters on Wall Street Bets had opened accounts with Robinhood Financial, a new stock-trading app advertising free stock and options trading and the ability to buy fractions of shares. They were buying GME and a handful of other stocks with large short positions, including AMC and BlackBerry (BB), the smartphone maker, trying to drive the prices up and force the short sellers, who were mostly hedge funds, to buy back stock to cover their shorts, inciting short squeezes that would cause the prices to go up even more, potentially bankrupting the hedge funds. So far, the strategy was working—GME had started the month of January around \$17; by the time McShane started reading about it on the message board, it had closed at over \$380.

McShane considered himself an experienced investor, and he knew all about short squeezes. He had been trading stocks since 2006 using a variety of low-cost brokerage accounts; currently he was using E*TRADE, which charged him \$7 for each transaction. He felt he had always been disciplined and careful and had avoided downloading the E*TRADE app on his phone so it was harder to make impulse decisions. But he had also been burned in the past after managing to save several small pots of money and then losing them in the market as a result of corrupt shenanigans by sleazy companies that took advantage of their investors. After watching banks and Wall Street firms receive bailouts in 2008 during the financial crisis they had caused, he was convinced the system was completely rigged to make money for Wall Street at the expense of small investors like him. Still, he had never witnessed anything like the mass anti–Wall Street movement he was seeing on Wall Street Bets. After the market closed that day, DFV posted his portfolio, showing a gain of more than \$30 million on his GME. There were others with huge profits posting, too, and they were being urged not to sell their stock, to try to hurt the shorts even more. Melvin Capital, one of the short sellers, was said to be losing billions of dollars, which filled the Reddit traders with glee.

McShane felt a powerful surge of trust and goodwill within the community on the message board. As he scrolled through the almost fifteen thousand comments DFV's post had generated, he became even more convinced that he was witnessing the formation of a populist uprising that had the potential to take on the forces of the Wall Street establishment and possibly win. One comment urging people not to sell their stock stood out for how well it captured the mood and the growing movement: "LISTEN UP YOU FUCKING RETARDS For once in our miserable lives we can show those greedy boomer fucks who really runs the stock markets," it read. "We are the 99%, and we have a lot more influence than you think. These next couple of days might be our only chance to really hit them where it hurts. Their deep, undeserved, bailed out wallets. I will take the money that I earned from this and create centuries of generational wealth for my family and I. Give these hedge funds a taste of the bullshit they've been doing to working class people for decades. DO NOT LET THIS OPPORTUNITY GO TO WASTE, WE ARE LIVING THROUGH HISTORY. HOLD."

The founders of Robinhood Financial did not expect to find their company at the center of one of the biggest stock-market frenzies in history. The app made trading so easy that some observers compared it to a video game or an online-gambling site. The company was started in 2013 by Vlad Tenev and Baiju Bhatt, who met during a summer research program while attending Stanford University. Their idea was to bring stock trading to the masses by making it simple, cheap, and accessible, much the same way other entrepreneurs had made shopping, weather reports, and social media available on a smartphone. They tried to brand the business as a potential antidote to wealth inequality, stating that their company motto was "Democratizing finance" by giving average people access to the stock market. Tenev cited Piketty as his inspiration.

Tenev and Bhatt's real innovation was to apply Silicon Valley design principles to finance and banking. The Robinhood app made opening an account and getting set up to trade sophisticated products such as options—which were much riskier than stocks and required mathematical modeling to fully understand—so simple that anyone could do it. It was also simple to open a margin account, where a user could trade with borrowed money. Like many other tech-company founders at similar stages of development, Tenev and Bhatt were focused on increasing growth at the company as quickly as they could so they could hold an IPO, which would make both of them mind-bogglingly rich.

Trading commissions were already low; discount brokerages such as E*TRADE and Charles Schwab were charging \$5 or so for each transaction. But Tenev and Bhatt wanted trading on Robinhood to be, or at least to seem, free. In order to offer free trades, Robinhood had to find ways to bring in money that didn't involve commissions. They quickly figured out that they could generate significant revenue from payment from order flow, a controversial practice in which a broker routes customer trades to high-frequency trading firms, like Citadel Securities in Chicago, which was founded by Kenneth Griffin. The high-frequency firms paid Robinhood fees for sending them orders; they executed the orders and took a cut out of the price for themselves. Payment for order flow (a.k.a. PFOF) is restricted in Canada, Australia, and the UK in part because it can be seen as creating a conflict of interest. Brokers like Robinhood are incentivized to send trades

to whichever firm will pay them more, rather than to the market where their customers will get the best prices. Robinhood insisted that it wasn't driven by PFOF fees and that it got the best prices for its customers, but because it's so controversial, Robinhood tried not to draw attention to it.

The more Robinhood users trade, the more money Robinhood makes. Every part of the user experience of the Robinhood app is therefore designed to encourage trading. The color scheme features a bright green, and trades are executed by swiping on the screen of one's phone. There are nudges and reminders to place trades and, in the app's early days, celebratory on-screen confetti. Scholars who study casino design note the similarities between Robinhood's interface and the organization of slot machines, which are built—down to the carpeting, seat heights, and color schemes—to keep people in their chairs gambling. Nir Eyal, the author of the Silicon Valley bible *Hooked: How to Build Habit-Forming Products*, said: "The first rule of interactive design is, the easier something is to do, the more likely people are to do it."

Eyal's book outlines four steps companies can take to develop habitforming products. It has become a foundational text in the technology industry, helping shape social media platforms, video games, and iPhone apps that have proven to be addictive for vast swaths of the population. (Eyal has since published a book called *Indistractable*: How to Control Your Attention and Choose Your Life, about how people can cure themselves of screen addiction.) Eyal said that the thought of applying the habit-forming design principles used in video games to something as serious and risky as stock trading made him nervous. He recalled a meeting he had with Tenev and Bhatt in 2014, when Robinhood was in its early stages. Bhatt showed him a logo they were considering (it was ultimately discarded) of a grinning Cheshire cat with a big cigar and said they were applying the *Hooked* model to the financial markets. "I loved the idea of helping more people invest in the stock market," Eyal said. What bothered him was that the business model was encouraging rapid-fire day trading, when on average this caused most investors to lose money. He also didn't like how opaque Tenev and Bhatt were about how the company would make money. "It didn't sound like free trades to me," he said.

McShane, who is thirty-three, is tall and broad-shouldered, with thick, dark hair and a strong jawline. He wants to be an astronaut, and he looks the part. He had found himself at BU, living in a sparsely furnished one-bedroom apartment and struggling under a punishing load of physics and math classes, after a military career in the navy. From 2008 to 2009, he was stationed in the Persian Gulf in the control room of a nuclear reactor on an aircraft carrier. He joined the US Pacific Fleet of the Naval Air Force in 2013 and trained to fly electronic warfare jets called EA-18G Growlers, which are loud, lethal fighter planes equipped to jam up enemy radar systems. They're known as the "quarterbacks" of the skies.

As McShane navigated the physical and mental challenges of each of these endeavors, he was driven, as he is today, by one burning desire: he wants to go to space. Starting in 2010, McShane had used the benefits of the G.I. Bill to collect college degrees that he hoped would move him in that direction: a bachelor's in astrophysics from Penn State, a master's of science in space systems from Florida Tech, and a master's degree in public administration from Columbia University. Before BU admitted him, he estimates he had applied to, and was rejected by, more than twenty PhD engineering programs, including his first choice, MIT. He has applied twice to NASA's astronaut candidate training program and been turned down; he feels that he's qualified, but the program receives around twelve thousand applications each year for ten spots, and McShane lacks the Ivy League pedigree that many other astronaut trainees bring. The average age of entry is thirty-four, so for McShane, the window is closing. If he doesn't get to space through NASA, he plans to follow the example set by billionaires like Elon Musk and Richard Branson and finance his own mission to the moon. Or fly himself there on a spacecraft of his own design. Which would take a lot of capital. So far, his attempts to build a fortune in the stock market had failed.

McShane had been trying to save money to invest during graduate school by being very conscious about his spending—a habit he learned as a kid. He was careful not to accrue credit card debt and only bought cars—always used—with cash. He never replaced things, like a pair of shoes, until the old ones fell apart. "I wouldn't call myself 'cheap,'" McShane said. "But I'm very value driven in all capacities."

The Wall Street Bets message board presented a whole new way to invest, by tapping into the minds of its millions of users, and you could

have fun while doing it. The site is, ostensibly, a place for people to exchange investing ideas—its tagline is "Like 4chan found a Bloomberg Terminal." It's also an online repository of nihilism, f-bombs, emojis, GIFs, sarcasm, and, occasionally, idol worship expressed through self-deprecating lines like "He is my wife's boyfriend," the ultimate compliment paid by one day-trading captive to another, superior trader. Users refer to one another semiaffectionately as "apes" and "degenerates." Not surprisingly, a remarkable 98 percent of Reddit users are male, and 92 percent are under age thirty-five.

The subreddit's success—it now has more than twelve million subscribers—is the result of a unique combination of societal factors, including the rise of the internet, the free stock trades pioneered by Robinhood, widening wealth inequality, and a youth culture rooted in post-2008 financial resentment and gallows humor about the future, all combined with a global pandemic that forced millions of young adults to stay at home while they collected unemployment checks. The most active members on Wall Street Bets, and the ones who most define the raunchy-junkyard aesthetic of the site, communicate through acronyms—a sort of insider code. One of the most popular is YOLO, which stands for "you only live once." It implies that whoever is using it has wagered an imprudent amount of money on an investment and that they are prepared to lose it all.

The dramatic price increase in both GME and AMC in late January 2021 generated frenzied coverage in the press, with news headlines describing the battle between the Reddit traders and Wall Street hedge funds as an internet David versus Goliath story. McShane described the pandemic as "an accelerant" of the dramatic price increase and short squeeze with GameStop. "What is an accelerant? It's something that pushes us faster into an inevitable future," McShane said. "If that future is us sitting online all day, getting smarter about things, and using Zoom and Discord and Reddit, that is a metaverse. The pandemic was an accelerant of human beings and homo sapiens into the metaverse."

As GameStop's stock climbed in early 2020, the number of people using Robinhood's free trading app exploded, going from around twelve million in early January to thirty-five million in February. Of all the people who opened new brokerage accounts in 2020, most were new investors. They also tended to be younger and to have less money to invest than those with more experience. The app's growth tracked closely with the growth of

Wall Street Bets. The two entities became intertwined as FOMO (fear of missing out) culture took hold of more and more young adults. There was a woman who guit a job that she hated and invested her life savings in GME before getting diagnosed with cancer. A homeless young man living in his car who bought a single share using borrowed Wi-Fi. A college student who lost his sports scholarship during the pandemic, whose GME profits could help him stay in school. A recovering drug addict who traded options to support himself. One trader, a thirty-one-year-old North Carolina fish farmer named Will Brown, told me that traders on Wall Street Bets were clear-eved about what it would take to achieve the financial security that had come so easily to their parents. "I'm not going to be able to retire by working full-time. With the way things are and the way prices are going up, you have to have something else going on," Brown said. "You have to be invested. Even if there's risk. In the long run, you don't make enough money in a lot of fields to be able to sustain a retirement. This is to supplement that."

McShane grew up in the suburbs of Philadelphia in a large family where honor and patriotism were part of the culture. McShane's mother worked as a fraud investigator for QVC and later became a jewelry salesperson, and his dad was a software engineer who worked in IT. McShane was one of four boys, each around a year apart in age (his mother had wanted a girl, too, but never got one), and because there were so many mouths to feed, the money they had needed to go far. The boys shared rooms and wore one another's hand-me-downs; going out to restaurants or on exotic vacations was rare. When McShane was twelve, his parents divorced, which set off years of costly custody battles, during which the boys were shuttled back and forth between the two homes. When McShane was in high school, he and his brothers moved to Pleasanton, California, with their dad, where they didn't know anyone. McShane's father bought the boys matching leather jackets, which made them stick out. "People thought we were these weird greaser-Quakers," McShane said. But the boys were good students and endowed with athletic talent; all four played baseball, which helped ease the cultural differences they felt between themselves and the native Californians. "We kept each other in check," McShane told me.

He remembers the morning of September 11, 2001, vividly. He went to his first class that morning, and the teacher turned on the TV, where the smoking World Trade Center towers were set off against a bright-blue sky. Everyone seemed confused and shocked. It took a few days before McShane understood the complex geopolitical dynamics behind the event and why America had been targeted by a group of fundamentalists from Saudi Arabia and Afghanistan. "When you're still in high school, what can you do? What power do I have? I remember feeling that," McShane said. "I couldn't really do anything. But my brother Ryan could." The boys' father had served, briefly, in the army. McShane's eldest brother, Ryan, had just turned eighteen. Their father was in the midst of a second divorce, and their parents told them that if they wanted to go to college, they would have to finance it themselves. Ryan enlisted and left for basic training.

"I remember the first time I ever felt anxiety in my life. We were always so good at every sport, because we had one another to beat up," McShane said. "We never worried. We were just competitive, smart boys. We were always in the gifted programs. But I felt anxiety for the first time, in my chest, sitting in class. I had to go to the doctor. I felt something that I'd never felt before. It was anxiety about my brother."

Justin, the second-eldest brother, enlisted a year later, and McShane and his remaining brother, Kevin, moved back to Pennsylvania with their dad, who was now twice divorced and newly unemployed. During his senior year of high school, McShane became overwhelmed by anxiety and depression. Although his grades had once been high, leading him to fantasize about attending college at Carnegie Mellon University, where he planned to study physics, he started skipping school, spending many days lying in the baseball dugout at a local park, hiding from his dad. His grades plummeted, and he had to attend summer school in order to graduate. His GPA was so low that year that he ended up at a middling college in Central Islip, in New York, that was housed in a building that had previously been a mental institution. The only thing he really wanted to do was fly fighter jets, like his older brother, but his grades weren't good enough to even join the ROTC. "I'm dead broke with no job, no career lined up," McShane said. "I just ran away, basically." He dropped out of college and moved to South Texas to chase after his older brother Kevin, who had been arrested for selling marijuana. They got jobs at an Albertsons supermarket in El Paso; McShane worked stocking produce, and Kevin was behind the deli counter.

Their parents were worried and suggested they join the military, like their two older brothers, as a possible way out of their dead-end jobs.

One day, McShane recalled, he and Kevin came outside after work and found a navy recruiter set up on the street corner. Kevin failed the drug test and they were sent home, but a few months later, they tried again, and this time he passed. They were both recruited into the Naval Nuclear Propulsion Program, which trained engineers to operate nuclear propulsion plants aboard naval vessels. They joined as part of the "buddy program," a track that allows siblings to attend boot camp and training together. McShane and his brother were plunged into an intense ninety-hour-a-week training program, during which they learned about atomic physics and how nuclear reactors aboard aircraft carriers provided the power for jets to take off. Only a tiny percentage of those who started the nuclear reactor officer training program actually finished.

After completing training in 2008, McShane was eventually sent to serve in the nuclear controls department on the *Abraham Lincoln*, an aircraft carrier stationed in the Gulf of Oman during the "war on terror." The job of operating the reactor on board was hellish. Reactor officers spent most of their time in the belly of the ship, where there were no windows. The shifts were eight hours long, and the officers weren't allowed to read, look at smartphones, or in any way become distracted. McShane couldn't check the news or stock prices, and the shifts were painfully boring. The pressure was also intense. If any officer who wasn't authorized tried to touch the control panel, the reactor officers were trained to break their arm. McShane often emerged from his shifts not knowing whether it was night or day. Several other reactor officers had mental breakdowns and left; at least one died by suicide.

McShane said he managed to persevere because his dream was to fly. "I never gave up on that," he said. "I would stare at the field of heat from jet blasts while on the flight deck, when I would have a few moments of free time. That is an experience that you will never forget." In order to be admitted to the prestigious flight training program, he needed recommendations from his superiors, which meant doing a meticulous job serving his commanding officers. He passed his physical and got his eyes checked, and that fall he applied to the Seaman to Admiral-21 Program, which would enable him to enter the naval flight training program.

There was a satellite TV in the small lounge outside the entrance to the reactor control room, and it was almost always set to CNBC, which broadcast every lurch and plunge of the stock market as the financial crisis gathered force that summer. McShane often stood there watching as executives of Wall Street firms were insulated from the consequences of their bad decisions while people who couldn't make their mortgage payments lost their homes. The pay for nuclear reactor officers was among the highest in the military, and McShane had agreed to redeploy while in a combat zone out at sea, earning him a tax-free \$100,000 bonus, with 50 percent up front. His friends told him he should invest it. McShane already had some money invested in a few Fidelity mutual funds. During his breaks, he went to the ship's library and researched investments on the computer terminals that were there for the sailors to use. When he received the first \$50,000 of his bonus, McShane thought to himself, *Let's make something of this*.

He didn't know a lot about the stock market, but he knew the name Warren Buffett—he was one of the most well-respected investors in the country. Buffett preached that the real way to build wealth was to make long-term investments in solid American blue-chip companies. As the financial crisis ground on, Buffett told Congress that the country would face "the biggest financial meltdown in history" if it didn't bail out some of the country's largest banks, which were facing massive losses due to the collapse in value of subprime mortgage bonds that they owned. McShane watched as Buffett himself invested \$5 billion in Goldman Sachs and the government spent hundreds of billions of dollars to rescue Citigroup, the insurance company AIG, JPMorgan Chase, and others.

When the 114-year-old auto-manufacturer General Motors became distressed as a result of the worsening recession, McShane thought of Buffett's famous line: "Never bet against America." Right after the government announced a multibillion-dollar bailout of the company, he decided to bet big, using all his bonus money to buy shares in GM through his Fidelity account. He was so sure that GM would survive that he went even further, imprudently borrowing \$30,000 from the bank and using it to buy more stock. Less than a year later, GM filed for bankruptcy. McShane didn't understand that this meant that all the shareholders would be wiped out. He watched as the value of his GM stock dwindled to nothing. "It was a financial nightmare," he said. "It was a rookie mistake."

As he watched the balance in his account evaporate, McShane was consumed with an increasing sense of despair. He stopped sleeping and found himself trudging through his duties in such a state of exhaustion that he felt like he might collapse. He felt the forces of Wall Street, the government, and the whole world conspiring against him. He desperately needed a financial bailout for his mistake, but he knew one wasn't coming. Finally, one day in March 2009, he stumbled into the corner of the reactor room and broke down in tears. "I'm pretty sure I had given up any belief in God for many years," McShane recalled. "But in that moment, I turned to God, and I prayed right there." When he calmed himself down, he walked upstairs to the reactor controls office. A message had just come through announcing the results of the naval flight training program applications, which he had been anxiously waiting for. He ran down the list until he got to the USS *Abraham Lincoln*, his ship. He saw "Petty Officer McShane, pilot," listed. He had been admitted. "It was a miracle," he said.

That fall he entered an undergraduate program in aerospace engineering at Penn State. He had to complete the degree in three years to meet the navy's deadline to begin flight training, which meant he had to take seven or eight classes per semester. Shortly after he graduated, in 2013, he started thinking about investing again. He had recouped some of his General Motors losses by setting aside almost all his military salary during the last five years, leading to almost \$100,000 in savings. On January 1, 2014, the same day one of McShane's brothers was discharged from the army, Colorado legalized retail cannabis sales. Cannabis stocks spiked as investors scrambled to find opportunities to profit as decriminalization spread across the country. McShane researched the drug, reading studies about CBD potentially curing cancerous tumors in dogs and reducing symptoms of epilepsy. He had barely ever used cannabis himself, after having spent several years in the military, where using it is prohibited. But the industry was exploding, and everyone seemed to be getting in. He chose a handful of promising cannabis stocks, put 25 percent of his savings into each, and waited.

A few months later, as McShane was finishing his first year of flight training, several of the companies went through reverse stock splits, controversial maneuvers companies sometimes use to try to boost their stock prices, by canceling all the shares outstanding and replacing them with fewer shares. It was a technique that usually indicated the company

was in trouble financially. Instead of pushing the share price up, the splits caused the stocks to go down. By that point, McShane says, his total losses, including the GM debacle, came to almost \$200,000.

He had made two enormous, stupid errors. But he also thought of the cannabis episode and the GM bankruptcy as "market anomalies," freak events that showed how corrupt the market could be, and how, when things went wrong, it was almost always retail investors such as himself who lost the most. He was determined to be more careful the next time.

Many of the tens of thousands of traders opening new Robinhood accounts in January were unaware of how the company was making money off them. Robinhood was growing so fast that it did not have the infrastructure to keep up. It had already experienced several service outages on its platform, when its users had been unable to make trades, and financial regulators had fined the company \$70 million. On January 25, the beginning of the week of the GameStop short squeeze, Robinhood's trading systems were already failing. That day, the company's chief operating officer, Gretchen Howard, told Tenev that the platform was seeing very high trading volume, likely due to all the social media activity around GameStop. Tenev, who was the company's CEO, had noticed it, too.

Others at the company noted that the high trading volume was causing their trade-processing systems to "start to buckle under pressure," as Robinhood's head of data science put it in an email to his bosses. Most trades take two to three days to settle, which means that after an investor buys or sells a stock, it can take three days before the transaction actually clears and the money changes hands. Brokerage firms are required to maintain capital as collateral to cover the value of those trades during the interim. After the market closes, brokerage firms submit information about all the transactions their customers made that day to the entities that settle the trades—the Depository Trust & Clearing Corporation for equities and the Options Clearing Corporation for options. If trading volume is higher, the DTCC or the OCC will typically demand that the firm have more capital available. Robinhood was processing so many trades that it was scrambling to report to the OCC in a timely way, and its systems were struggling to execute customer account transfers on time.

While this was going on, Tenev and other top executives held a company all-hands meeting, where they spoke proudly about how fast the company was growing. Behind the scenes, staff members involved in the growing settlement crisis joked about how they should really be talking about the extraordinary steps the US Department of the Treasury and the company's business partners were taking to help keep them from collapsing. "We don't handle scale well," a manager wrote to Jim Swartwout, the president of Robinhood's trade clearing division. Swartwout replied, "That is probably the biggest understatement of the day."

The next day, after the market closed, Elon Musk, the CEO of Tesla, threw gasoline on the GameStop fire when he tweeted, "GameStonk!!" with a link to Wall Street Bets. The message was retweeted more than thirty-four thousand times, and there was an immediate spike in new Robinhood account applications. On January 27, Tenev was worried about whether the company would have enough cash available to fulfill its obligations to all its customers. "Just make sure our liquidity stays green," he wrote to Robinhood's CFO, Jason Warnick, around 11:00 a.m. that morning. Warnick reassured him that he was working on it. But as GME's stock price was pushed higher, from \$249 to \$347, by enormous buying pressure from Robinhood users and others in the market, employees started to brainstorm ways that they could slow down the trading volume on the platform, perhaps by instituting limits on how much stock customers could own of GME and other "meme" stocks such as AMC and BB.

There was also a sort of nuclear option they could pursue, one employee said: they could restrict GME and other volatile stocks to "position closing only," which would mean that customers could sell only what stock they already owned and couldn't buy more. Robinhood's head of data science suggested that such a move was so drastic that it could trigger a market crash. A product manager in the brokerage department agreed: "It's a bad look. We're supposed to support the retail."

After the market closed, the company announced a \$10,000 limit on all customer holdings in six stocks: GME, AMC, BB, EXPR (Express), KOSS (Koss Corporation), and NOK (Nokia), as well as similar limits for many options. They struggled to come up with a coherent way to explain the restrictions to their customers. The one thing everyone agreed on was that, although it was driven by the enormous risk the company was facing—due largely to its lack of preparedness—they shouldn't reveal that to their

customers. Employees marveled at how close to collapse the firm seemed to be, internally, while the public perception was that everything was running smoothly. The director of account operations summed it up in an email to several colleagues: "We are definitely on the edge."

January 27, for Gabriel Plotkin, the founder of Melvin Capital, was distressing, but for different reasons. Plotkin, forty-two, had been on a hot moneymaking streak for the past several years. He had made his career working as a portfolio manager for Steven Cohen at SAC Capital, a fund that had been shut down over insider-trading allegations in 2013 (Plotkin was never implicated). Like both Michael Burry and Keith Gill, he was known for conducting intensive research, sometimes lasting years, into the companies he invested in. Most of his investments were traditional long investments, where he was betting that a company would grow and its stock price would go up over time. But occasionally, he took a large short position when he felt a company was in trouble.

Soon after Plotkin launched Melvin in 2014, he started shorting GameStop after concluding that the company would eventually fail as video-game sales moved online and its chain of physical stores withered. By late November, Melvin was short several million shares. Plotkin was alarmed when he found out that traders on Wall Street Bets who had studied Melvin's SEC filings—where some of its GME short position was listed—were organizing to target him and his fund for a short squeeze. He could barely believe that a collection of nonprofessionals posting on a public website could accomplish something so sophisticated, but it worked. Melvin Capital was down 30 percent after showing losses of billions of dollars. The situation was so dire that Steven Cohen announced a \$750 million new investment in Melvin, seemingly to try to help it survive; Kenneth Griffin, the head of Citadel, made a \$2 billion investment. News articles described these infusions of capital as emergency bailouts.

Early on the morning of January 28, the DTCC sent its daily automated notice to Robinhood with its collateral demand for the day: \$3.7 billion. It was a stunning amount of money—at least four times higher than the previous highest collateral requirement Robinhood had ever faced. Robinhood already had almost \$700 million on deposit with the DTCC

from the day before, which meant that it was expected to transfer \$3 billion more to the DTCC before the market opened. It was not yet 6:00 a.m., and the first person to see the notice was a Robinhood manager based in Orlando, Florida. The manager sent a message to a former Robinhood executive to ask if he knew what would happen if the company couldn't meet its margin requirement. The former employee replied that the manager should call the DTCC right away and try to negotiate a lower number. "And wake up your senior leaders," he wrote. "Time for a cash infusion."

At 6:30 a.m., Howard, Warnick, and Robinhood's chief legal officer, Dan Gallagher, held an emergency meeting, where they decided to try to slow down new account openings that day. They also determined that, in order to prevent their collateral charges from becoming even bigger, they would need to block their users from buying more GameStop.

That same morning, McShane checked the GameStop stock price as soon as he woke up. He had barely slept the night before. It was around \$508 in premarket trading. Then, shortly before the market opened, Robinhood made an announcement: investors would not be able to buy any more shares of GameStop and thirteen other stocks—the broker was turning off the "Buy" button. "We continuously monitor the markets and make changes where necessary," Robinhood said in a statement. "In light of recent volatility, we are restricting transactions for certain securities to position closing only." The company hinted that the high volume of trading in those stocks was the source of the problem, but it didn't fully explain what was happening behind the scenes.

McShane was stunned. He was still only a spectator in what was unfolding, but he knew that trading was occasionally halted when, for example, news was coming out about a company and it was trading erratically and the exchanges were struggling to keep up. But turning off the "Buy" button alone, while still allowing people to sell, was almost unprecedented. E*TRADE and several other brokers announced they were doing the same thing. If only sales were permitted, it would force the price of GameStop to go down and go down quickly.

When the market opened at 9:30 a.m., GME and the other meme stocks plunged. Around 11:30, Alexandria Ocasio-Cortez, the New York

congresswoman, called (via Twitter) for a congressional hearing: "This is unacceptable. We now need to know more about @Robinhoodapp's decision to block retail investors from purchasing stock while hedge funds are freely able to trade the stock as they see fit."

McShane went into the engineering lab, as he had planned. He and a friend who was also there watched as GameStop dropped almost \$100, then swung wildly, finally closing around \$193. At the end of the day, when DFV posted his portfolio on Wall Street Bets, it showed that he had held on to his stock, but the profit he had shown the prior evening had dropped by about \$14 million. Someone wrote: "HE FUCKING HELD WHAT A LEGEND."

To McShane, the decision by the brokerage firms to shut off the "Buy" button looked like a blatant attempt to send a lifeline to Melvin Capital and the other hedge funds who were being squeezed by the Reddit army. Most others on Wall Street Bets seemed to agree. Hundreds of posts noted the connections between Robinhood, Citadel—which cleared most of its trades and which was the source of most of its revenue—and Melvin Capital, in which Ken Griffin was an investor. During the next few days, Wall Street Bets exploded with condemnations of Robinhood and posts urging people to hold on to their shares, to continue to inflict pain on Melvin. People invoked justice, Wall Street greed, bank bailouts, and the 2008 financial crisis. People started closing their Robinhood accounts and moving them to Fidelity and the few other brokerages that hadn't blocked GME buying.

"My takeaway was, it was an unfair game from the get-go," Brown, who moved his account, told me. "These companies had obviously levered their way into a really awful position, and then when push came to shove, they put their finger on the scale and got them to break the rules of the stock market. They literally manipulated trading, rather than allowing the market to do its thing. The system is not put in place to serve people like me."

The sense of outrage inspired a rash of new memes based on well-known action movies, showing retail traders against the financial establishment as an epic clash between good and evil. In one clip from *The Matrix*, Keanu Reeves's character, Neo (representing r/wallstreetbets), prepares to fight his adversary, Agent Smith. "Retail investors *aren't* supposed to get rich," Smith says, glowering. He's flanked by a group of fighters labeled "Robinhood," "Melvin," "Shorts," and "CNBC." They all start shooting, and Neo holds his hand up, deflecting the bullets. Another

clip dramatized the finale of *Avengers: Endgame*, with a beleaguered-looking Captain America representing DeepFuckingValue, facing off against the evil hedge funds in his lonely quest to convince the world to appreciate GameStop.

McShane said that something profound changed for him that day. He'd had his own bad experiences in the market in the past. But watching fraud and corruption happen on such a vast scale—with Robinhood, which claimed to be "democratizing finance," basically transferring money from the pockets of the average investors who were its customers to bail out big hedge funds—was enraging. "When I saw those droves of apes and kids get ripped off, and when I saw the passionate Avengers videos, showing the good guys against the bad guys, something clicked in me, that I need to fight," he said. "I need to actually fight, with every ounce of my being. Until this stops. We need to fix this market now."

One thing that tugged at McShane was DFV, the mysterious investor who had started the whole thing: Who was he? That night, Reuters posted a news story with the answer: "Famed GameStop bull 'Roaring Kitty' is a Massachusetts financial advisor." His name was Keith Gill.

The decision to prevent people from buying GameStop seemed, to McShane and others on Wall Street Bets, to have the desired effect: a few days later it had dropped below \$100. Suddenly, the gains that millions had seen in their accounts, which could have formed the basis for down payments on first homes or college tuition, vanished. Brown said he had left college before graduating, and he'd been working at a fishery for about three years, managing stocks of sturgeon for producing caviar; he started investing around the time he'd started the job, when he downloaded the Robinhood app at the suggestion of a friend. He started by experimenting with penny stocks, making mostly losing bets. Then DFV's GameStop posts on Wall Street Bets caught Brown's attention: GME was already up a lot, to around \$22. He decided that the short squeeze could actually happen and put about \$1,000 into buying call options on GME stock, with a strike price of \$60. On the morning before Robinhood halted purchases of GameStop, Brown says, his account showed a balance of \$1.3 million. "It was more money than I had ever seen in my entire life and all the jobs I had ever worked, cumulatively. That times ten," Brown said. "I wasn't sure what to do; it was a lot to handle."

When the market reopened and trading of GME resumed, the value of his options started to drop. He panicked and sold them, earning a small profit, but only a fraction of what he would have had at the peak. Seeing GME's price dropping further, he quickly bought puts, which would increase in value as the stock went down, but it suddenly reversed course, and he lost money. He was disgusted by Robinhood's decision.

A software engineer named Seth Thomas, who lives in Brooklyn with his wife, started looking intensively at GameStop in March 2020. "From my perspective, I couldn't understand why it was so low," he said. "I thought it was maybe a value investment." That fall he came across Gill's Roaring Kitty channel, and it bolstered his intuition. He started buying shares when they were under \$15, slowly building up to a six-figure position. In early January GameStop announced that Ryan Cohen would be joining the board, which to Thomas seemed like a positive development. "There were multiple days when we came home and there were more packages from Chewy than from Amazon in our building," he said. He liked Ryan Cohen's investing philosophy. "I really liked his business ethic," Thomas said. "His dad was an entrepreneur, and my dad was an entrepreneur. He knows what he's doing. He likes to stay ahead of the market." Thomas bought more, until he had about \$200,000 worth.

As the stock price continued going up that January, Thomas said: "I got spooked, to be honest. I wasn't in it for some market overhaul or to overthrow Wall Street." He and his wife talked about coming up with an "exit plan" so that he would know when to sell his shares. They decided if GME got to the \$600 to \$800 range, he would sell. They watched excitedly as the price crept toward \$300 and then surpassed it; on January 27, Thomas's Robinhood account balance was well over \$9 million. His head began to spin. When Robinhood halted all buying the next day, he knew that most of that profit would disappear. "My immediate reaction after that happened was, I'm going to transfer my shares out of Robinhood to Fidelity," he said.

The following week, Robinhood was still struggling to stabilize its finances, and it still maintained limits on how much GME its users could hold in their accounts. Then, on February 2, McShane started buying GameStop in his E*TRADE account. "I was mesmerized by what was happening on Wall Street Bets," he told me. Later that month, the House Financial Services Committee held a hearing, during which Gill testified, along with Tenev, Plotkin, and Griffin from Citadel. McShane watched closely, scrutinizing the answers. Tenev described what had happened as a "Black Swan event" that couldn't have been predicted or planned for and insisted that the decision to restrict buying of GameStop and other stocks was driven "purely by deposit and collateral requirements." Plotkin was asked about naked shorting: how a stock could possibly have more shares short than were in circulation, which seemed to be the case with GME; if every short seller had borrowed each share it sold, as required by SEC rules, this would be impossible. Plotkin said that his firm always shorted stocks "within the context of all the rules." McShane thought the members of Congress questioning the witnesses had been far too friendly, letting them get away with avoiding giving answers and barely addressing the obvious corruption he saw at the heart of the entanglement among Robinhood, which had halted trading; Citadel, which was Robinhood's biggest customer; and Melvin, which had been bailed out in part by Citadel. "I was remembering all the times when I got screwed over, in other market anomalies, in 2008 and 2009, when everybody was getting bailed out but retail," he said. "I don't think I learned anything I didn't already know about internal corruption on Wall Street. But this opened up a Pandora's box. At that point, it became about justice."

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EPILOGUE-ISH

In April 2021 the moderators of Wall Street Bets said that they were moving most of the ongoing GameStop discussion to a new board called Superstonk. McShane practically lives there. Time reading and posting on Superstonk and Wall Street Bets has come to dominate his life, edging out what little social interaction he had and time he used to spend playing video games with his brothers. In the fall of 2020, he decided to leave BU and his work on space imaging and took a job within the Commerce Department analyzing patent applications for propulsion rockets and related technology.

Boston was becoming too expensive to live in on his graduate-student salary, and he wanted some financial security. Becoming an employee of the federal government, which granted him eleven years of seniority, counting his time in the military, provided it. He spent the last few months buying more GME shares and trading GME options. Melvin Capital had announced that it had bought back all the shares of GME that it was short, at enormous losses, and said it no longer had any position, but the posters on Superstonk were skeptical.

McShane is convinced that Melvin, and Citadel, are still short and are intent on crushing individual GameStop traders such as himself by conspiring to drive the price down further. Many of the others on Superstonk agree with him; they pass their days analyzing trading data, searching for proof that hedge funds are taking illicit steps to depress the price, and sharing that with one another on the board. McShane compared it to an ongoing, open-source computer-programming project, where people from all over the world contribute searches for signs of conspiracy and anomalies and build on what others have done. "It's an anticorruption movement," he said. "It is the sword of the people. And it is attacking Wall Street. It is slicing and dicing. It is sending petitions. It is voting. It is very

powerful. And I think it's only growing more powerful. And I think it's the beginning, quite honestly, of the future of the market."

McShane is continuing toward his PhD and will apply, again, for the NASA astronaut candidate program next year. Until then, most of his free time is consumed by writing long posts on Superstonk and Wall Street Bets and obsessively tracking every element of GameStop's price movements; he says he feels "addicted" to his Reddit community—his online family. He sees signs of corruption in almost every major American institution, including Congress, the financial markets, and the Federal Reserve. "I am so freaked out by what I have found," he said. "I am so freaked out. I think somebody will go to jail, and I think it could be this year."

McShane and other traders started taking their GME shares and registering them directly with the transfer agent, an entity that keeps track of the ownership of stocks, which is a way of removing them from circulation so that hedge funds can't borrow them to sell short. He says he and others on Reddit have so far moved twelve million GameStop shares this way. McShane and others are certain that, eventually, this will help trigger a MOASS, a "mother of all short squeezes," when all the hedge funds will finally be forced to buy their stock back and the price will skyrocket again. "The preponderance of the evidence proves that hedge funds have not closed their short positions," he wrote in January. "I am doing this for my family's future. I am 100 percent confident that I will be upgrading my home to a mansion, and my family vehicle to an SUV: Lamborghini Urus."

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ABOUT THE AUTHOR



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Sheelah Kolhatkar, a former hedge-fund analyst, is a staff writer at the *New Yorker*, where she writes about Wall Street, Silicon Valley, economics, and national politics, among other things. She is the author of the bestseller *Black Edge*, about the largest insider-trading investigation in history and the transformation of Wall Street and the US economy, which was named a Top Book of 2017 by the *New York Times*. Before becoming a journalist, she spent several years as a risk arbitrage analyst at two hedge funds in New York City.

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