

A Silicon Scandal: Timeline of a Crisis

alternatively **Cyberpsychoterror and its Effects on the Innocent Bourgeoisie**

FEBRUARY 3rd , Santa Clara, California, 5:07 am

The phone rings.

It gets sent to voicemail, and the voice on the other end starts recording their message.

“Hey Dan, it’s Jeff, I know it’s early but this is REALLY important. We, uh, we need to talk *now*. You know that bug I found before launch that Greg said was nothing and we should ignore it and just ship the product? It’s not nothing. It’s really far from nothing. Call me ASAP.”

Before he can end the message I reach over and slap “Accept” on the receiver.

“Jeff, Jeff, I’m here, don’t hang up. What do you mean it’s not nothing?”

“So.. okay, shit, man. That bug, right? With the encryption, where it gets stuck and keeps reusing the same couple of keys? Someone figured that out. I don’t know how long they’ve known, but not only have they figured out how to read data from active calls, they just figured out how to write it too. That’s the only reason I know – someone called customer service and they didn’t know what the hell was going on but they knew this couldn’t wait for a bug report. Apparently the guy heard a crash in his kid’s room and he went in to check and the kid was sobbing on his bed and his SendFeel was on the other side of the room in a couple dozen fragments. Obviously he helped out his kid but next thing he did was call us. The customer service rep was clearly out of his depth, but by the sounds of it, the kid received nearly pure anxiety instead of whatever he was expecting. It’s exactly the issue we thought it would be and there’s going to be hell to pay if and when this gets out. We have to fix this *now*.”

“Okay, okay, god damn it, man, alright, I’m calling Legal. Thanks for not leaving this until morning. I’ll call you back soon.”

God FUCKING damn it.

I told Greg three months ago that this was a potentially fatal, I mean actually fatal, weakness in the device. Why the fuck won’t he listen to me? Who has the fucking T in their title, me or him? He’s Chief Executive Officer because he’s supposed to be good at leading companies. I’m the Chief Technical Officer because guess what I’m fucking good at? TECHNOLOGY. Am I not the most qualified person to tell him when we aren’t ready to ship?

I have to call the lawyers. By the sound of what Jeff said, they’re not planning to press charges, but this is a serious issue and for every person targeted before we get a patch out, the threat of legal action grows exponentially.

Knowing what’s coming won’t be pleasant, I pick up my phone to find the lawyer’s number. I don’t have to call them often, so it takes a moment, but I find it, pause to collect myself, and hit “Call.”

FEBRUARY 3rd , Santa Clara, California, 5:33 am

The lawyer hangs up, and I set my phone down for a moment as I exhale deeply, melting backwards onto my chair.

According to the lawyers, it certainly could have been worse, but things could be a LOT better right now. Like every company with a product that allows user-generated content, the EULA exempts us from responsibility for what our users send via SendFeel, in much the same way that Verizon wouldn't get in trouble for providing cell coverage to a criminal's prepaid burner phone. On that front, SendFeel is safe.

Apparently, where we're not safe, however, is the fact that we shipped a product that was insecure enough to allow unauthorized usage of our system in such destructive ways. If I understood the lawyer correctly, the fact that Greg knew about the bug and told us to ship it anyways might be criminal negligence. Us too, since "following orders" isn't as robust a defense as it used to be.

FEBRUARY 3rd , Santa Clara, California, 5:34 am

I promised Jeff I would call him back, so I do. To nobody's surprise, he answers immediately. I tell him what the lawyer told me regarding negligence, plausible deniability, etc. I also pass on the message that we, I mean Jeff or I personally, need to get in contact with the father of the victim and get more details about exact circumstances.

FEBRUARY 3rd , Santa Clara, California, 6:12 am

The phone rings, again. It's Jeff, again.

"Any word?"

"Yeah I just got off the phone with the dad." A surprise, but Jeff's proactivity is one of the reasons I brought him on. He continues, "I'll deal with whatever shit I get for this, but I promised him a full refund and compensation for therapy or counseling for his kid. He said he wasn't planning to press charges, but this should make him less likely to change his mind on that, and it was the right thing to do anyways."

"Thank you. That's a relief, and I'll make sure nobody gives you a hard time about promising compensation. Given the circumstances, it was the right move. Now, next order of business is to fix the source of the problem before this hits more people."

FEBRUARY 3rd , Santa Clara, California, 9:16 am

I'm two and a half hours into tracing through our encryption code, praying I can identify a solution that doesn't require a ground-up redesign, when the second call comes in. Victim two is confirmed and named.

Nineteen year old Portland resident Lucille Garvey.

I can't tell whether this second victim makes our problem more or less than twice as bad, but she confirms a theory none of us wanted proven; both parties in a call are affected by the attacks.

Ben, Jeff says that's the first victim's name, was the person on the other end of the call with her. Ben was lucky he had family nearby. Lucille, a freshman at Reed College, was fourteen hundred miles from her family and had apparently not been assigned a roommate. As such, the time difference between Ben's father and Lucille calling us was four hours, a number matching exactly the time it took Lucille to recover coherence after the attack.

Lucille, having experienced the attack first-hand, was more useful in describing the nature of the experience. She'd been on a call with Ben, SendStoning.

As a brief aside, I know these are exceptional circumstances and she gets medical amnesty and all that, but it's actually been a mounting problem for us. The youth have figured out a legal loophole wherein they, in a state that has not legalized cannabis, can share emotions with someone who is in a state where it is legal, and they can both feel the effects at once.

Anyways, her story lines up with what Ben said, which is that they were on a call with each other and, after about five minutes, the mellowness each was experiencing was supplanted wholly and instantaneously by an all-consuming anxiety. This lasted for a few seconds until they each regained the werewithall to remove their SendFeels, at which point each had a complete mental breakdown. For each of them, the first action after recovering was to contact SendFeel.

FEBRUARY 3rd, Santa Clara, California, 2:43 pm

The third and fourth attacks have been confirmed. Very similar situation to that of Ben and Lucille, except this time it wasn't anxiety but overwhelming existential dread. Once again, neither victim seemed able to put into words the magnitude of the emotions, but one got the impression they now knew firsthand what H. P. Lovecraft imagined it would be like to stand before Cthulu.

Again, by some divine miracle, neither seemed inclined to press charges, and each readily accepted our compensation offers.

FEBRUARY 4th, Santa Clara, California, 7:36 am

I open my phone and head to Apple News, as I do every morning during breakfast, and am greeted with the SendFeel logo at the top of my feed. In bold print beside it reads "Massive Security Breach Exposes SendFeel Users To Psychological Terror Attacks."

I'd told myself it wouldn't happen, but of course it did. Someone had the brilliant idea to talk to the New York Times before talking to us about being attacked. Talk to us, we'll fix the problem. Talk to them, now the whole world is looking at us and adding stress to a problem we're already operating at maximum capacity to resolve.

Anyways, that brings the total number of victims up to six, and, what's more, the pair who called the press have also filed a lawsuit against us. One of them has also, apparently, filed a lawsuit against their

therapist, who, against our Terms of Service, had told them to use SendFeel as an experimental treatment for anxiety disorders.

FEBRUARY 4th, Mountain View, California, 8:15 am

This isn't a fun call for Sam to make, but it's in the job description as a Lead Subsidiary Liaison, so she doesn't have a choice. SendFeel, one of the primary assets she has to babysit, is in PR meltdown right now, and it's her job this morning to remind them of the deal they made when Google acquired them. To Google's credit, they do a pretty good job of allowing the startups they buy to continue running as they already were, just with big boy funding, and this policy generally serves all involved parties well. Honestly, it makes Sam's job easier, too, but it isn't perfect.

Take this situation, for example. SendFeel is owned by its employees and Google, so the only people their mistakes can reflect poorly on are... themselves and Google. Google doesn't hide their relationships with any of their subsidiaries, but when one has this catastrophic of a PR day, it's in their best interest not to remind people who's funding the source of the controversy, and that's what Sam now has to remind Greg Dunlop, SendFeel's CEO. Google isn't going to cut ties with SendFeel as long as SendFeel doesn't associate Google with this debacle.

She doesn't exactly brace herself as she dials Greg, but the tension is mounting the longer the phone rings. In the interest of avoiding becoming a shot messenger, she settles on a 'help me help you' tone by the time Greg answers.

"Hi, Mr. Dunlop, it's Samantha Chen, your Google Subsidiary Liaison. I understand it's been a bit of a rough few days for you, so I'll keep this short." While not a joke, she delivers it with the sort of sympathetic lightness that relieves a modicum of tension from conversations nobody wants to have.

"Hi Samantha, it's good to hear from you. I was wondering when I'd get this call." Unsurprisingly, he'd disregarded professional decorum and opted to use her first name, but whatever. For what little it was worth, at least he'd returned her personable tone.

After a light exhale to acknowledge his pleasantries, she started into her spiel.

"I'm sure you're already familiar with what I'm about to tell you, but it is my job to remind you of the nature of the relationship between SendFeel and Google. Before I get into it, though, I'd like to just say that we have, so far, been very pleased with the work you've done, and that the purpose of this call is not to express any regret on our part about our investment. That said, when we acquired SendFeel, we made it clear that we intended to preserve its startup-like workplace environment and stay pretty hands-off, as we believe this to be a healthier atmosphere for innovation than heavy beauracracy. As you also know, this independence means that when something goes wrong, as it currently seems to be, it's your responsibility to handle it – not Google's. If necessary, we can offer legal support, but I am to request that you be cautious with your press statements and avoid reminding the public of any ties between Google and SendFeel. I apologize for how brutal this phrasing is," and Sam genuinely was sorry, "but, in the most concise terms possible, as long as you don't drag our public image into your mess, we'll provide necessary support to help you out of it and we'll be happy to continue our relationship

thereafter. Please don't give Google a reason to distance ourselves from SendFeel – we do still believe the technology you're pioneering is revolutionary in all the right ways."

There's a pause as Greg collects his thoughts. It seems the final "we promise we're not mad" reminder has put a damper on the response he was preparing as Sam spoke, and he's reconsidering his tone.

After a moment, he begins with "Alright. I will pass that on to the rest of the team. Rest assured, we are capable of handling this on our own, and we will keep Google's name out of it. Thank you for reaching out."

"Of course. I'm sure we'll speak again soon, Mr. Dunlop, and I hope the rest of your day improves."

"Thank you, same to you."

She hangs up. Okay, it wasn't that bad, and while she now has to relay to her own bosses the updates she'll receive over the coming weeks regarding SendFeel's situation, the immediate stress is out of the way, and she may well have just averted a PR nightmare for Google.

FEBRUARY 4th, Pasadena, California, 9:02 pm

When Thomas Lindbaum received the call that a malpractice suit had been filed against him, he was greatly confused and, understandably, distraught. Like anyone would, his mind immediately started trying to remember any and every questionable thing he'd ever done, even infractions as small as delaying patients' appointment because he'd woken up late.

When the name SendFeel was brought up, he was even more confused. That wasn't even a medication. How was he in trouble for that? It wasn't until his lawyer said "Amanda Tremblay" that Thomas understood.

Amanda was one of his favorite patients, but also one of the most difficult. Among other things, she had come to him with one of the most severe cases of major depressive disorder Thomas had ever treated, but she was almost to a point where his services could switch from repair to maintenance. He was confident enough that her recovery would continue apace that he had recommended that she purchase a VR headset and a SendFeel. Amanda was not a terribly well-off person, however, since her mental illness had kept her out of work for the better part of a year, and such devices were outside of the scope of her budget. Although Thomas now saw that the right decision would have been to pay for her devices personally, the decision he made at the time was to exploit a quirk in the phrasing of her health insurance policy that allowed him to write prescriptions for the devices and have her provider cover the costs.

It was an experimental treatment that he was pioneering himself, so there wasn't any existing documentation on it and Thomas had to design her treatment plan from the ground up. The premise was to practice spontaneous, yet surprisingly deep, interactions with strangers in a low-stress environment. This would also double as a preliminary foray into the use of new technologies such as SendFeel for therapeutic purposes. He'd settled on a sort of two-stage plan. In stage one, Amanda would spend time in VRChat, a popular platform reminiscent of the public forums and chatrooms of the early internet, but with voice chat and 3D-modeled avatars of whatever vaguely-humanoid form the

users desired, making genuine, but low-stakes friendships with random people on the internet. If this went poorly, all she had to do was block them, move to a different server, and start over with someone new.

This went remarkably well, and, after a few weeks, Amanda had found a few people she really clicked with. Stage two, then, was to share a connection with them on SendFeel while in VRChat to better understand their emotional states while meeting new people and holding interactions that Amanda found stressful or intimidating in the real world. This was intended to train Amanda both consciously and subconsciously to be more comfortable in those situations, while also allowing her insight into the minds of other people in the same situations as proof of one of the central themes of her therapy sessions with Thomas, which was that people are genuinely not as judgemental as Amanda thought.

When you walk into the grocery store to buy a deli sandwich at six in the morning, wearing the old t-shirt and shorts you've repurposed as pajamas, the number of people who will judge you is exactly equivalent to the number of people who will judge you when you walk in wearing a dress shirt, slacks, and a tie. This is also, not by coincidence, equivalent to the number of people who see you, and is due entirely to the basic human need to interpret that which enters our field of view. The judgement passed on you is based entirely on the predispositions of those who see you. The age-old saying that "beauty is in the eye of the beholder" is true for every single other trait that can be assigned to a person, and the combination of SendFeel and VRChat allowed Amanda to understand this on a much deeper level than Thomas could ever verbally explain.

It also brought extra weight to a speech he'd given her a few weeks back, regarding the fact that some people, generally referred to as "assholes," will look at the person in pajamas and judge them to lack dignity or control over their lives. These are not people one would want to be friends with anyways, so their opinions don't matter. Other people, of the type worth associating with, are more likely to look at you and see a fellow human, wondering whether you're up late or early, what you're gearing up for or winding down from. While they may assume your present state to be below your usual, this will elicit not disdain but compassion and hope for the resolution of whatever has your state below normal.

This message was one of the hardest for Amanda to accept, but, within a week of using SendFeel, she seemed to have fully internalized it. She was almost two months into these SendFeel/VRChat therapy sessions, and was mere weeks away from graduation to the real world.

Thomas used the word "was" because, according to his lawyer, her life was now wholly in the past tense. Her parents were the ones who had filed the suit, and they blamed him. Thomas, probably for his own good, absorbed only the words "no pulse" and "still wearing her SendFeel" from the lawyer's retelling of events.

Also according to the lawyer, Thomas was wholly and utterly fucked because he wrote a prescription for her SendFeel. Apparently, this pretty unambiguously constituted criminal negligence and medical malpractice for prescribing the use of a technology in a medical capacity before even a single study regarding its safety and efficacy had been published. Thomas and his lawyer were both of the opinion that the true perpetrator was the person who had hacked the SendFeels, but unfortunately that wasn't going to clear Thomas of the malpractice and negligence accusations.

FEBRUARY 5th, Santa Clara, California, 10:23 am

Terminating my fifth call to the lawyers in the last twenty seven hours, I let out my four hundredth sigh in the same period. This one, however, unlike its predecessors, is of relief.

The lawyer said a lot, using a lot of big words. I'm a tech guy, not a lawyer, but I go over it again in my head and write down some notes about the conversation to make sure I remember the most important parts. In a miraculous turn of events for the plaintiff, apparently, there's very little backlog in terms of pending cases and our court date is set just three weeks from now. This is not good news for us though, and we, meaning mainly our legal staff, are on full throttle preparing our defense.

Anyways, the lawyer's predictions are, paraphrased by me, basically as follows. Legally, we'll be fine. Well, I'll be fine. Greg is probably going to be sentenced to a couple years in prison, of which he might serve a month. SendFeel will be fined seven, maybe eight digits for shipping an unsafe, premature product, and all extant models will have to be recalled or refunded, but our net loss there will undoubtedly be under two hundred million, which Google should help recoup once the PR storm blows over. We, obviously, will be required to find and implement a solution to this issue before we're allowed to ship any new SendFeels or return recalled products, but we were going to do that anyways. We will also cooperate with authorities in tracking down and prosecuting the hackers. In short, with the backing of the legal team of one of the largest companies in the world, we should be fine, which is a relief.

Not everyone will be, though. Jeff called yesterday to pass on more information about the victims, and he said it's actually one victim and the other victim's family who are suing us. The second victim herself was apparently pretty unstable already and the attack was more than enough to push her over the edge, so in addition to suing us, her family is suing the therapist Jeff mentioned. You know, the guy who broke our Terms of Service and prescribed SendFeel as a treatment.

I asked my lawyer what will happen to him, since, sure, he broke our TOS, but I feel like the people who are actually at fault here are the people who hacked the system and the people who okayed the hackable system, and that answer wasn't nearly as pleasant as the one regarding my own fate. That guy has no chance. His lawyer might be able to talk him out of some of the charges, but whatever his sentence is, he's going to serve the full term of it, and it'll be well more than what Greg or any of us get.

That feels wrong. But it was *his* idea that ultimately led to her being in a call at the right time to be attacked, leading to her death. *I* didn't tell her that using SendFeel would make her depression go away, he did. *I* didn't overload her SendFeel with depressive emotions, the hacker did. It's not *my* fault she's dead, and it's not *my* fault he's going to prison for it. Yeah. *He* deserves this, not me. And plus, it wasn't even me who shipped the product. *I* thought it was a bad idea. If anyone, blame Greg. He greenlit it even though he knew it was faulty. *Greg* is responsible for her death. *I* did all I could to tell him we should delay release, but he ignored and overruled me. I'm not the bad guy. I actively stood against it. Greg enabled the murderer, but I didn't enable Greg. I didn't even write the problematic code, so I couldn't have just "written better code" and saved her life. That was probably some intern who messed up. Not me. Blame the intern. Or Greg. Or the therapist. Or really the attacker. Or her. She killed herself, so really it's her fault, right? It's not mine. I'm the good guy. I tried to stop all of the bad guys.

Her death can't be on my hands.