

Shrimps

Bill Xia

My roommate orders hibachi to our apartment every night. And I don't mean delivery. I mean that every night of the week, Sunday through Saturday, he has a guy come to our place, set up a flat top grill, and make him some stir fry.

Now, it wasn't always this way.

I dropped out of Stanford in 2007. My team had a patent, some capital, and heads full of dreams. Our company was called A-Ray Systems. We were going to be the next Intel or AMD, selling our microchips to Silicon Valley and making millions. Our flagship product was the Poco A4, twice as power-efficient as our competitors and optimized for parallel computing. We debuted our design at an IEEE conference that fall, and by the end of spring, we'd secured a partnership with a local foundry and were pumping out over a hundred A4s a day.

A month later, the recession hit. Silicon prices exploded and investors started pulling funding. Hewlett-Packard and Dell, our main customers, put their purchases on pause. Suddenly, A-Ray was in crisis mode. We had a storage closet full of microchips without a single buyer on the market. That was okay. We could pivot.

We had Jason hit up his contacts overseas. Sammy talked to his uncle in Dallas. I called every electronics company I could think of, begging each one to buy our chips. At one point, we were selling A4s for a tenth of the manufacturing price just to keep the lights on. In the end, we sold over two thousand little green wafers. Our closet had forty-five hundred more.

By then, our capital had run dry. We had to end our partnership with the foundry, and with student loans growing by the day, we sold the company and our patent not long afterwards. The deal we struck with IBM was just enough to pay off our debts.

The night after we sold out, the three of us went to Chiko's. We were sitting at the same table where A-Ray had been founded. Jason had sixty days before his visa expired. Sammy was moving to Dallas to apprentice for his uncle. And me? The market crash put both my parents out of work, and without any other family in the country, I didn't have any fallbacks. All I had to my name was a box containing forty-five hundred pieces of silicon.

"What if we made a new chip?" I wondered, three drinks deep and still full of dreams. "There's still space to improve on the A4. If we go back to the drawing board, we could make something even better."

"Give it up, man," Sammy said. "Even if we make a new chip, we're never going to get it off the ground without funding."

"We don't have a lab anymore, either," Jason added. "You can't make chips without equipment."

"Then we'll improvise!" We'd traded our diplomas for this dream. We couldn't just give up. "There has to be some fight left in you guys. Give it one more chance and we'll make it big, I promise."

"We fought the fight," Sammy retorted, more tired than annoyed. "Half a year of fighting the market and our investors. Half a year of attending meetings instead of seeing my family. Half a fucking year of doing nothing but getting rid of Poco A4s." He threw his arms up. "I'm done fighting, Kevin. I can't do this anymore."

The table was quiet for a minute after that. It was true. I couldn't remember the last time I'd had a full night of sleep. For six months, I'd been doing everything in my power just to keep the company alive. But I couldn't just give up. I'd staked everything on A-Ray. There had to be a way to bring it back.

“I’ll find a way,” I finally said. “Lab or not, funding or not, I’ll bring A-Ray back.”

“How?” Sammy asked. He’d always been the voice of reason, always making sure we had a direction to follow.

“That doesn’t matter.” I don’t think I ever came up with an actual plan. “I’ll get the money and I’ll make the new chip. And when I do, you guys are gonna get a call from me, saying A-Ray is back. We’ll have a new product, a new office, and there won’t be a company in Silicon Valley not using our chips, just like it was meant to be. You’ll see.”

* * *

Three years have passed since then. Sammy’s off in New York working at IBM, and the last time I called Jason, he said he was working at a semiconductor lab in China.

As for me, I work in IT at a family-owned paper manufacturer outside of Oakland. I spend my days restarting PCs and refilling printers. In my spare time, I sell A4s on Ebay, using the funds to buy equipment for making my own microchips. Progress has been slow. The six hundred and twenty-two that I’ve sold so far have let me rent a lab space downtown, which I’ve filled with a homemade lithography unit, fifty sheets of electronics-grade silicon, and a few gallons each of hydrogen peroxide, boron arsenide, and half a dozen other chemicals that could probably put me on a no-fly list. My improvised foundry is less than a quarter complete. Fortunately, I still have three thousand, eight hundred, seventy-eight Poco A4s waiting in my closet to be turned into cash. Once they’re all gone, I’ll be able to start making my own chips. I try to avoid calculating how long that will take.

A couple months back, I moved into an apartment closer to the office. My roommate is a guy called Kyle Wang. I don’t know what he does for a living. My first week in the apartment, I saw him twice: once when he let me into the place for the first time, and again when I found him

playing *Assassin's Creed* in the living room at seven AM on a Wednesday. Since then, I've barely seen him. He keeps his door locked at all hours of the day, and more often than not, I can hear him in there, the sound of his keyboard clacking through the door.

One time I asked Kyle what he does for a living, during a brief encounter on my way to the bathroom.

"Typing," was all he had to say.

"Oh, like web development?" I asked.

"No."

"Are you a writer?"

"No."

And then he turned around and went back to his room. For all I knew, Kyle could have been a hacker working for the CIA. Or maybe he played video games for a living and paid his rent with YouTube ads. It didn't matter much to me. As long as he was in his room, he wasn't bothering me.

Then Kyle started ordering hibachi.

I don't even remember when it started. One night, I had gotten off work for the night and was walking through the front door when I was assaulted with the scent of smoke and something being sauteed. The clatter of spatulas on a griddle turned my attention to my left. There was a sixty-something-year-old Asian guy operating a grill in our living room, dressed in a white jacket and a ridiculously tall, red chef's hat. The man had just set a pile of onion rings on fire, casting a violet light that illuminated the flecks of grease staining the carpet. The new carpet. Kyle, who sat slouched on the couch across from the grill, looked on with amusement.

"Hey!" I yelled at him, dropping my bag by the door. "What's going on? Who's that?"

Kyle jumped, looking at me with a confused expression as if *I* was the unreasonable one.

“That’s Mr. Sun. I ordered hibachi.” The chef smiled as he waved hello.

“You ordered hibachi,” I repeated. “Why?”

“I was feeling hibachi tonight.”

“You—” Another plume of flame exploded out of the onion volcano. Squinting away from the inferno, my eyes drifted to the coffee table, which had been shoved into the corner of the room. Stacked neatly on top was every single smoke detector in the apartment. “You can’t be serious.”

“We’ll be done in a few minutes,” Kyle assured me. “You can watch if you want.”

For a second, I was ready to call our landlady right there and then. Oil spills, smoke stains, monoxide poisoning—she had every right to kick Kyle out, or at least confiscate his security deposit. But then it struck me that neither evicting Kyle nor making him lose his security deposit would instantly get rid of the flaming onions in my living room. The onions were here to stay, at least until someone ate them, or the rest of the apartment caught fire with them. By the fire extinguisher beside Mr. Sun’s grill, I hoped the latter wouldn’t be a problem.

“I’ll pass,” I said, slowly collecting my things from the floor. “Make sure you clean up afterwards.”

“Okay.”

That night, after a quick dinner of over-salted mac and cheese, I settled into my creaky swivel chair to sell some microchips. Mr. Sun had left after a long conversation with Kyle, leaving the apartment uncomfortably silent. I never noticed how quiet it usually was.

I opened Ebay to an empty inbox. No offers in over a week. Moore's Law states that the most advanced chips on the market get twice as powerful every two years with minimal increases in cost. I wondered how long it would take for the A4 to become entirely obsolete.

These were dangerous thoughts. I kicked away from my desk to escape them, the motion sending me whirling across the room. When the world was done spinning, I found myself facing my closet, open just wide enough for me to see my three thousand, eight hundred, seventy-eight Poco A4s, each encased within its very own plastic storage shell, stacked into twenty-four pristine, unwanted layers.

In the three years since that night at Chiko's, I had made little progress towards my promise. I needed to sell the rest of the A4s to finish my foundry, and even the equipment I already had wasn't entirely functional. My lithography unit had taken the better part of a year to finish and it still barely worked—it seems that recreating a machine that costs over a hundred million dollars with a budget of only ten thousand doesn't yield industry-level results.

It occurred to me then that even if I sold every microchip in my closet, I might not be able to build the successor to the A4. Even after blowing thousands of dollars on equipment and materials, I still wouldn't have the means to produce anything better than the stacks of silicon sitting in my closet.

I felt a sudden desire to get the hammer from my toolbox and smash those useless stacks into bits. I wanted to melt them down into a big heap of slag and throw them into the ocean. I wanted to light them on fire like an onion volcano because I was alone in the suburbs of Oakland with a dead-end job, no college degree, and a closet full of Poco A4s to remind me every single day that there wasn't a thing I could do about it.

Instead, I stood up, took three measured steps towards my closet, and shut the door. Then I turned off the light and laid down on my bed to stare at the darkness of my ceiling.

* * *

The following evening, I opened the front door and was once again greeted with the hiss of the flattop and the clang of stainless steel. This time, I did not stop on my way past the living room. I didn't notice Mr. Sun juggling pieces of chicken with his spatulas and I didn't notice Kyle catching those pieces with his mouth.

That night, I didn't open Ebay and I didn't look at my microchips. After dinner, I washed my singular dish and laid down to sleep. I did the same thing the day afterwards. And the day after that. And the day after that. Devoid was my mind of any ambition to return to the Valley, to resurrect my company, to dispel the scent of smoke and grease and Japanese stir fry from my apartment walls. At the end of each of my days spent installing Windows updates and reconnecting bluetooth mice, I saw no point in anything besides lying down and closing my eyes until the next blare of my morning alarm.

* * *

By now, I don't remember on what day Kyle began ordering hibachi to our apartment. I don't remember the last time I felt the urge to get rid of my microchips or visit my foundry. Days have slipped into weeks, and the smell of burning propane, the clamor of spatulas, and sight of the ruined living room carpet have faded into the background. I am in autopilot and I do not care to put my hands back on the wheel.

“Hey, I'm ordering delivery. You want anything?”

I'm finally losing it. Untold weeks of mind-numbing IT have caused my neurons to decay within my skull, allowing Master Chief to break from his programming and offer to buy me dinner. I pause the game to grapple with my fraying sanity. He speaks again.

"Hey, you there?"

The voice isn't coming from the TV. Kyle is standing at the threshold of the living room with his hands in his pockets, wearing the same grey t-shirt and sweatpants he's worn since the day I moved in.

"Did you say something?"

Kyle frowns. "I'm starting to get tired of hibachi, so this is probably the last time. You want any?"

It takes me longer than I would like to register what he's asking. I wasn't exaggerating about my neurons. Eventually, I say okay.

"Cool. What do you want?"

"I don't know. What are you getting?"

"Shrimp fried rice."

"I'll get one of those."

* * *

Mr. Sun arrives half an hour later, dressed in the same white jacket and cylindrical red hat he's worn every time he visits our place. Another ten minutes and he has his grill fired up beside a red cooler full of supplies. Kyle and I share the saffron-colored couch directly across from him.

"This is the first time you've joined us," Mr. Sun says to me with a warm smile. He flips a pair of metal spatulas in his hands, juggling them behind his back and spinning them around his fingers. His movements are fluid, almost casual. I try to picture him practicing his juggling in his

youth, before lines creased his face and his hair receded underneath his towering chef's hat. Mr. Sun closes the performance with a shrill *clang* as he rings a spatula against the grill. "Why now?"

"Kyle said this was the last time." My ears buzz from the sound. "I figured I could skip making my own dinner for once."

Mr. Sun nods, raising a squeeze bottle high over his head to send a jet of oil onto the pan. "You cook most nights?"

My eyes are on the grill as he spreads the oil over the flattop with a single sweep of his spatula. "Yeah, I think so. Saves money, so I don't really go out that often. Besides, it's only fun to go out if it's with other people."

Mr. Sun starts flicking sliced zucchini out of his cooler and onto the grill. Each piece makes a satisfying hiss as it lands. "Why not go with Kyle?"

Walked into that one. Despite sitting only a few inches from me, Kyle seems more interested in the sliced vegetables than my answer. "I don't think our schedules are super aligned. Whenever I come home, he's already eating."

Mr. Sun laughs at this. "Yes, you always appear in the middle of the show." He spoons a bit of sauce onto each slice of zucchini. "You work hard?"

I shrug. "Long hours."

"Hmm." He snatches a steel pepper shaker and makes a show of seasoning the vegetables, rattling the shaker against the blade of his spatula. "I work lunch and dinner all days but Monday. You know how often I get tired?"

I crack a smile. "All the time, I imagine."

Mr. Sun returns the expression. “Never.” He dumps a pile of grey shrimps onto the grill and spreads them out to cook. He takes a step back to admire his work. “I love this job. Done it for thirty years.”

I can’t imagine doing anything for thirty years. Certainly not IT. “You never wanted to be more than a chef?”

“What more is there to be?” Mr. Sun has to yell to be heard over the grill.

“You could own your own restaurant,” I say.

He laughs. “Then I wouldn’t have time to cook!” Mr. Sun starts flipping shrimps. The undersides have turned bright orange. “Seems too stressful anyhow. Can you imagine owning a business? So much work.”

“Believe me, it is.”

Mr. Sun gives me a curious look. “You own a business?”

I nod. “Used to.”

“What did your company do?” He slides a narrow knife off of his belt with a flourish and begins slicing the tails off the shrimps one by one.

“We sold microchips,” I say. “I still have a bunch of them, actually. Trying to sell them all so I can restart the company.”

“Are you close?” Mr. Sun puts away the knife and scoops an egg out of the cooler. He begins to spin it on his spatula. I pause for a moment to watch Mr. Sun toss the egg a few times. Eventually he flips it high, the egg arching upwards before disappearing into his hat. Kyle claps.

“No,” I answer quietly.

“Will you be?”

I don't answer. At my current rate, it will take nineteen years to sell the rest of my chips. By Moore's Law, however, my competitors will be producing chips that are seven hundred times more powerful than mine for exactly the same cost. I will never empty my closet.

Mr. Sun is juggling shrimps with a pair of spatulas now, and all I can do is watch the little morsels fly. I think about how each of my A4s is just a little bigger than any of the grilled shrimps. I imagine all three thousand, eight hundred, seventy-eight of them jumping between Mr. Sun's spatulas in a storm of semiconductors. I imagine myself within the storm, flying around this way and that, before being violently spat out, my fate determined by a thousand forces that I could not control.

Mr. Sun has just tossed a shrimp into Kyle's mouth. Now he tosses one to me. I watch it sail across the living room, spinning in chaotic pirouettes, reaching the apex of its shallow arc before falling in a death spiral towards my face. Except it doesn't fall into my mouth. It doesn't smack into my forehead, it doesn't even graze me. Because the shrimp has shot too high and has no way to stop itself from corkscrewing over my head and hitting the wall behind me with a muted *smack*, tumbling into the crevice behind my couch before bouncing to its final resting place amidst darkness and dust.

I consider reaching behind my couch to retrieve the shrimp. I imagine getting my elbow, maybe my shoulder, stuck between the wall and the couch, the rest of my arm blindly fishing for a ruined piece of meat. My fingers itch for the lost sliver of food.

Instead, I focus my eyes on the shrimps in front of me, and I do not look back.