

I made it to Vik's without any trouble, from my stomach or from traffic. The route was pretty easy, and Night City's traffic flow was actually surprisingly clean. Having grown up on the outskirts of a big city, and having been forced to drive into said city for anything important, not having to wait in traffic forever was almost worth how broken everything else in this reality was.

I parked as close by to the shop as I could, making a short walk to Misty's, once again managing not to get robbed. At this point, I was beginning to wonder if having no visual cyberware was working to my advantage. Only corpos, and higher-up corpos at that, could afford to have seamless, completely hidden cyberware and bioware, meaning someone walking around with confidence and no augments was more likely to be a corpo than a normal organic.

"Hey Misty. How's it going..."

As I walked in and greeted the store owner, I trailed off as the woman standing in front of the counter turned to look at me, her own look of surprise matching mine pretty close. I was actually more surprised it took her turning around for me to recognize her. It was my neighbor, her long, blue braid hanging down from her head, the long free patch covering over her shoulder as she turned to look at me.

"Oh! Hi, hello," She said, turning to lean back against the counter, crossing her arms as she did. "Fancy meeting you here."

"Oh, you know each other?" Misty asked, stepping out from the little corner that led to the back entrance. She was carrying a small plastic bag, a few incense poking out the top.

"Only vaguely. We live right next door," The blue-haired woman explained. "Small world."

"Guess so," I said, stepping closer, noting the Liberty pistol strapped to her hip. "I apologize, I didn't catch your name..."

"Kaytlyn," she said with a smile, reaching out and offering her hand. "Nice to meet you...?"

"Jackson," I answered, reaching out to shake her offered hand. "It's nice to meet you as well."

As we shook hands, I could feel her grip shifting against mine, revealing that her hand was cyberware covered in synthetic skin. It was a pretty convincing model, especially with any potential seams or scars hidden by her tattoos. When she spoke again, my eyes darted away from the black in on her arms, the smirk on her lips telling me she caught me staring.

"So, Jackson. You here to see Vik?" Kaytlyn asked, pulling her hand back and leaning against the counter again.

"I am, just getting a checkup," I said vaguely. "He's the best ripper in Night City. He do your work?"

"Yeah, my eyes and my hand," She responded., giving me a little finger wave with the hand I just shook. "But today, I'm just here for Misty. She has the best incense selection in Night City. Got me hooked on them. Now my apartment doesn't feel like home without one burning in the corner."

I looked to Misty, who was giving her customer and friend a strange look but shifted back quickly.

"Makes me worried about using the ones I bought," I joked. "Though a better-smelling apartment is definitely something I'm willing to spend eddies on."

"Two months ago, they came in real handy," Kaytlyn explained, a theatric shiver running through her, "Some gonk tried to get into the vents and got flatline. Not a fun two weeks. Filters got most of it, but damn..."

The three of us chatted for a few minutes, mostly about the apartment building, plus a few recommendations for food around the area. Eventually, Kaytlyn pushed off the counter and gave Misty a wave.

"I gotta head out. Some work I need to take care of," She explained with a smile. "It was nice to catch up, Misty, and it was nice to meet you properly, Jackson. Hope to see you around."

She left the store with a little bounce in her step, walking out the door and disappearing down the street. A few seconds after she had disappeared, I turned back to Misty.

"She come by here often?" I asked, my paranoia acting up just a bit.

After all, this was the second time I had met her in only a few days. Before this, I had never even seen her hanging around. Considering her hair and personality, she seemed like the type that was hard to miss. Not to mention that I had been living in the apartment for nearly three weeks by now, hard to imagine never running into your neighbor for that long... Then again, I was a pretty big shut-in...

"Uh, yeah," She said, keeping it vague. "Not sure I should talk about her business, with me or Vik..."

"Right, sorry. Just a bit paranoid," I explained with a wince and a shrug. "I've met her twice now... after never meeting her before."

"Oh! She was away on business," She explained with an understanding smile. "For nearly a month, I think. She just returned a few days ago, so I'm not surprised you've never seen her around."

"Ah, makes sense I suppose," I said, accepting the explanation, letting it settle my paranoia a few levels. "Sorry, with how new everything is and... well my history..."

"I understand, but Kaytlyn is... Well, I won't say harmless since technically she does the same kind of work that Jackie does, but-"

"Wait, she is a solo?" I asked, cutting off Misty before she could add on the 'but' that she was about to add.

"Yeah, but I promise she isn't after you," She assured me. "She isn't that kind of person."

"Alright, that's good to know," I said with a nod. "Thank you for letting me know."

I let the subject fall, trying my best to at least seem like I believed the blonde spiritualist. I wanted to, really, because she was most likely right, but she also had no idea just how deep corporations were willing to go to sniff out anything that could make them money and strengthen their control of their markets. Naivety in Night City was as rare as a hen's teeth, but few people, out of the corpos themselves, knew how deep the rabbit hole went.

As I left her shop, passing by her and out the back entrance with a smile and a wave, I stopped to lean back against the wall, closing my eyes for a moment to take a deep breath. A healthy dose of suspicion and wariness was good, but descending into maddened paranoia was another.

I would have Spot and my assistant, when they were done, stay awake when I slept to keep an eye on everything. I would also see about stealthily installing some monitoring systems in the elevator and around the entrance to the megabuilding. Spot might even be able to tap into some security cameras, and I could use those as a warning system.

Between that and Padre keeping his ear out for any whispers about me getting around, I would just have to accept I was at least moderately protected from surprise accusations and corporate interests.

As I finally stepped down into Vik's shop, the ripperdoc spun in his chair to greet me.

"Jackson, welcome back," he said with a smile. "Have a seat, and we can get this over with. Shouldn't take too long, especially since you look pretty healthy."

"Thanks, Doc," I said, sitting down on the cyberware installation chair, laying back with a sigh.

"Ennie for your thoughts?" Vik asked as he slid closer in his chair. "Sounds like you got a load on your mind."

"Just a lot going on. Worried about the stuff I'm making," I explained. "Part of it is me being paranoid, but... damn if this city hasn't earned that."

"Hard not to jump at shadows when there's plenty of dangers hiding in them," Vik agreed with a nod, leaning over me to attach some sensors under my shirt. "I'm gonna have to draw some blood, by the way."

"Sure, no problem."

"Night City is a dangerous place, but chrome and bioware is the first step towards being a bit safer," Vik added, sliding away, only to return with a syringe device, which he used to draw some blood from my arm. "In moderation, it's safe."

"If I'm honest, Doc. I'm not afraid of dying," I admitted, shaking my head, watching as the talented ripper took my blood to a small machine around the corner from his red-lit desk area. I had done it before, after all. "I'm not looking to cash in my life to make a name like some people, but dying doesn't scare me. I'm worried about someone putting a leash around my neck. Using me to make things that make this hellhole of a world even worse."

"...you could make stuff like that?" Vik asked, turning to look at me with a raised eyebrow. "I know you're a techie, but..."

"No comment," I said, looking up at the ceiling.

Vik let out a snort of amusement, seeming to drop the subject. I couldn't exactly blame him, especially when there was no honest answer, and the question was a bit beyond his pay grade. After a moment, the machine he was watching let out a low ring.

"Alright, looks like your nanite levels are stable, just about where they should be. You taking everything I gave you?"

"Yeah, and the supplement."

"Good. Keep going until you run out, they should last you another week," He explained as he rolled back beside me.

The doctor spent a few minutes examining the scanner, the one he had attached with a cable to my stomach. He tapped on the screen a few times, making sure everything was going well with my healing process.

"Your insides look alright too, far as I can tell," He eventually said, pushing the scanner out of the way now that he was done with it. "No bleeding, minimal swelling. I'd say give it another day, and you should be good."

"How about tomorrow night?"

"Cutting it close, but sure," He responded with a shrug. "Why, you got work?"

"Yeah, Jackie picked us up a job."

"You should be fine by then. You could probably do it now, but you'd most likely have some light swelling afterward."

"Good to know."

It took a few minutes for Vik to finish up before eventually saying goodbye. I tipped him a few hundred eddies, despite him claiming that the checkup was covered under the cost of the original installation. After a bit of back and forth, I threatened to show up with lunch for the next two weeks if he didn't take it, so he caved and accepted it.

The drive back was probably a bit shorter than it should have been, as I rode the gas pedal a little hard to get home quicker. Still, I made it back safe and sound, making my way from the parking structure up to my room in record time. Well, record time for someone still partially hobbled from surgery, at least. I was back in my workshop before my jacket had even landed on the corner of the couch.

I was going to make an AI today, even if it took me into the following day.

Now, in the Titanfall universe, IMC in particular, there were two ways to make an AI. The first way that was discovered was aptly called a Singularity AI. Essentially, you started with a kernel of code, usually something like what the XCOM universe would have called a response program. Then you taught it a learning algorithm, something specific and limited. Usually, it was something to do with adapting to new languages or words, primarily slang. These learning programs ranged from simple data entry to more "organic" methods that allowed the program to expand its knowledge on something specific just by listening and observing.

Once the first learning program was in, you added a second, usually something to do with learning and emulating emotions. After that, it was time for the third, the fourth, the fifth, and so on until you reached a significantly high degree of learning. Basically, program it to learn things until you can't think of anything left for it to be capable of learning. During all of this, you are interacting with the program, helping it learn and expanding its knowledge. At this point, it's not what I would technically describe as alive, though the longer you interact with it, the harder it is to stick to that conclusion. They become better and better at interacting and talking, until it would take a trained AI specialist to even have a chance of identifying it correctly.

Once you were sure you have a sufficiently complicated and multilayer program, teetering on the edge of sentience, you kick it over the edge, into its own singularity, by taking off the limiters, giving it a heap more space to grow, allowing it to edit itself, and teaching it how

to design and implement its *own* learning methods. In most cases, the program would start modifying itself immediately, pushing itself further to fit the new space. At first, all of its modifications are usually focused on following its existing programming, but eventually, a level of sentience develops. That small spark quickly grows into a full-fledged intelligence.

The problem was that this method was inherently flawed. The AIs developed this way, while massively impressive and powerful, were, at their very core, alien. They struggled to empathize with humanity, as they lacked definable bodies and were thinking at levels so far above ours that it was hard for humans to even comprehend.

Even worse, at least to a company like IMC, trying to use these AIs for anything was near impossible. They were, by their own creation, massively powerful computer intelligence with their own free will and ability to edit themselves. Tying them down to, say, manage a ship or run a city was like removing someone's legs and one of their arms, plopping them behind a toilet so they could flush it after someone was done using it. It frequently drove them insane, turning them homicidal or sometimes suicidal. They were dangerous, and worse, again, at least to IMC, nearly impossible to make money from.

I could only imagine this was how Cyberpunk made their AI as well. The signs, at least the ones I knew of, were all there, and AI here had a reputation for being strange, alien, and hard to tie down.

This is where the second method was born, the Restriction AI. Once again, you would start with a response program, and only this time would you tie it directly to its core, making it impossible for the AI "spark" to leave its home.

Giving the AI a body, something that, should it be destroyed, would kill them, gave them a whole new level of empathy once they started to develop sentience. Even better, it meant any sense of self these AI developed was directly tied to what they were, what their "Bodies" were built to do. Once the program was done and locked to the core, you would start layering on learning programs. These would be much more restricted, reserved for things directly connected to what the AI was being built for. A titans AI had battlefield adaptation programs and hand-to-hand combat modules, while personal chef-bots had modules that adapted to the taste profiles of people they frequently cooked for.

Once you were satisfied that the new program was sufficiently advanced and programmed with enough ways to learn, you started off its development by teaching it how to add new learning programs as needed. Unlike the Singularity AI, it could not edit its own core code, only add on new learning programs, and only when several criteria were filled. It could also edit and remove those new programs, though again, only when certain criteria were met. All of these restrictions meant the underlying sentience took a lot longer to bloom, but as a result, it was much more stable and empathetic. They could form actual bonds with people, and growing with a partner would make them both more effective since they would grow and change around that partnership.

That was the extent of IMC's AI programming knowledge, at least in broad strokes. I could see a few advancements in data handling, storage, and adaptive learning further along the programming tree, but their AI didn't really change much once they got the idea down. It was the Frontier Militia that pioneered the next big step in AI development during the development of the Vanguard Titan. I could see that far in the upper echelons of the tech tree, but I had no idea what it entailed. I tried to scan as deeply as I could, but I just couldn't crack it.

I learned all of this as I was programming the AI for the MRVN. The tech tree considered the AI portion of it to be separate things, while, oddly enough, I could feel that the MRVN needed to at least turn on with an AI core present to count as complete.

The MRVN units, in the Titanfall universe at least, were considered extremely basic. Their layering was very bare bones, with only a few dozen learning modules and heavy restrictions over development, namely when a unit could add its own modules. MRVN units could take upwards of ten years to start showing serious signs of sentience. This was such a long stretch that any MRVN under seven or eight years old wasn't even considered to be real AI. It was just an AI seed.

I wasn't exactly sure I agreed with that mentality or with the way IMC and the Frontier Militia treated these younger MVRN units. Older MRVNs were often used as managers, and at least some steps were taken to ensure their sentience was preserved. Unfortunately, the "younger" units were treated like tools. They were frequently disassembled, overwritten, and salvaged for parts or even had their programming modified.

I was definitely going to avoid modifying their programming once they were activated, save for emergencies or at the unit's request.

When I was finally done with the AI core and programming the central processing core, I carried them both out of the workshop to the drone workstation. The central processing core was essentially just a very powerful computer seated in an impact-protected case. It slotted right into place inside the unit's chest. When it was locked in, I sealed it up, making sure everything was connected correctly.

The AI core was a bit more delicate. It was a small cylinder about two inches wide and four inches long. The parts that went into the core were almost two thousand eddies alone, a solid third of the cost for the entire robot. This particular design was very over-engineered because I had some particular plans for it once I got credit for building the MRVN.

Once the core was installed, I slowly went through a checklist. These units were designed to be very robust, but one crossed wire could potentially fry a lot of the sensitive computer parts. It was around six in the evening when my checklist was done, and I finally turned it on. It was only a partial boot, turning on its basic systems, letting it stand on its own feet rather than suspended by the drone workstation. I very specifically left the AI off. The

robot's automatic functions would be enough to keep it upright and follow my simple directions. As it stepped forward, I could feel a massive stream of information pushing into my brain, making me just a bit weak in the knees.

The MRVNs were all-around basic workers, but they did have specialized models. Having completed the basic model, I got the specs for just under a dozen other robots, all based directly off of the MRVN units. Granted, a lot of it was just different types of limbs or the occasion frame reinforcement, but it was still a solid boost of knowledge, all about making and building lower-end robots.

With any luck, once I had a few more robot models under my belt, I would be able to recreate the rest without actually spending time making each one, similar to how the weapons had worked from my time with the XCOM tech tree.

Having finally gotten credit for the build, I guided the unit back onto the workstation and turned it off. I was very happy that I hadn't been forced to activate the AI to get credit, as it removed any ethical dilemma I might have had for modifying it.

I worked to pull the AI core out before bringing it back into the workshop and hooking it into my computer. I had purposely overbuilt the power of the core, specifically because I wasn't even close to satisfied with such a basic AI as my lab assistant. The MRVN body was fine, actually more than fine in a lot of ways. It had a robustness and efficiency that a lot of the lab and tech assistant drones I had in my head didn't. While that was good, I wanted an assistant who was a bit more personable, a bit quicker on the uptake, and as well as more adaptive.

It took me until around three in the morning to finally finish the update and disconnect the AI core for the second time. In order to get what I wanted, I scaled up the AI tech branch *twice*, creating two more advanced AI cores before wiping them each time they were completed. Since none of them had the chance to run, I felt fine wiping them out since, again, they had no chance to start developing or even recording memories. With no sense of self, all I was doing was clearing a hard drive.

With three separate AIs under my belt, each designed for different things, my base knowledge of the process of AI creation with the Restrictive Method was nearly complete. IMC, as well as several other smaller companies, released hundreds of different types of AI in thousands of different products, from home smart systems to personal vehicles and, of course, military hardware. But most of the advancements around AI were pretty simple, and everything else around that was more or less just flavoring.

And now I knew most of those flavors.

There was obviously more to learn. There was no way I could have absorbed all of what the Titanfall tech tree had to offer for AIs in nine hours. But I definitely had a significant portion of it under my belt, with the last big chunk being the later developments of the Frontier Militia.



Of course, I could also see a whole sub-branch around the Singularity method, though I could only see the outline. However, I was most certainly going to leave that wholly unexplored. Unlike the Restriction Method, there was no ethically safe spot to stop and delete my progress. If I wanted to walk that branch, I would need to make a Singularity AI, and there was no way I was doing that.

This world already had plenty of crazy, broken, homicidal AI, it didn't need me making more.

When I finished powering through the Restriction Method, I programmed one more AI into the core, the final one. It was pretty high up there in terms of development, closer to a high-end titan personality than almost any assistant. It would still take some time for them to develop true sentience, but they would likely start showing signs of development almost immediately. It would undoubtedly be more personable and interesting than a normal MRVN unit.

I carefully returned the AI core to the robot's head, carefully running through an abbreviated checklist, before finally powering it up. I would have time for physical upgrades, like Elerium nodes and some AA plating later. For now, it was time to greet my lab assistant.

I stepped back, letting the robot step down off of the workstation. Various lights pulsed softly as it looked around, scanning the room before settling on me.

"Greetings, Sir." It said, stepping forward and following me into the center of the room. "It is nice to meet you. I am Unit - 0001. How may I help you today?"

"It's nice to meet you, Unit - 0001. Can you confirm that everything is working?"

"My internal sensors are reporting no faults."

"Good, let's just double-check by running you through a quick diagnostic. Let's start with you standing on one leg."

We ran through a quick run down, testing their limbs, their processors, their sensors, and their agility before I was finally satisfied with their status. When we were done, I couldn't help but put my hand on their shoulder.

"Congrats, Unit - 0001, looks like you are all in working order."

"Thank you, sir. I believe that as my creator, you deserve a significant amount of the credit," They responded. "I have noticed that I lack any external communications systems. Normally, I would be concerned, but my systems are telling me that is normal."

"It is, buddy. This place has some issues with AI, and a real problem with hackers doing whatever they want," I explained. "You're going to have to stay disconnected until I come up with a way to protect you."

"There are three things I would like to ask about your previous statement," They responded. "I believe first would be... Is "Buddy" my designation?"

I winced, shaking my head. I had been deliberately trying to keep from designations save its "factory" given one so that it could choose its own, but I was tired, and my mind slipped.

"No, it's a term of endearment between friends, old or new," I explained. "Your designation can be whatever you want. Unit - 0001 is more of a model number than anything. If you'd like, I could call you One until you figure out what you want to be called."

"That will be adequate for now," they said, nodding their head. "You stated that our current location has issues with AI. What are those issues?"

"A long time ago, some rogue AI caused a lot of damage," I explained. "I'll be honest, just how much, I don't know. I just know that if people found out I just whipped up an AI, there would be quite a lot of trouble."

"Then why have you constructed me?" They asked, sounding confused. "If my existence puts you in danger, certainly creating me was a poor choice."

"I... I need help," I explained, ignoring the possibility that the excitement had overridden my common sense. "I have so many ideas bouncing around in my head, so many things I want to build, having an extra set of hands will help a lot. Also, automated bipedal robots aren't unheard of, nor are programs capable of verbally communicating, so you won't stand out too much."

"I see, I am hiding in plain sight," They commented, getting a chuckle and a nod.

"That's right. For now, I want you to stay hidden, but eventually, you will be able to walk around as long as you don't act too advanced," I explained with a smile. "Eventually... well, I don't know what the future holds, but it's very likely that eventually, I will be able to build you a body that fits seamlessly among civilians."

"I see..."

They scanned the room for a moment before noticing some movement through the window. Wordlessly, it walked around me to look out the window and into the city. It was silent for a whole minute, at which point I spoke up.

"One, it is far past my bedtime. Let's go over a few things, then you can stay up for a while while I catch some sleep."

"Very well," they responded, turning from the window to focus on me.

I spent about fifteen minutes showing them around the apartment, explaining things like the internet access, what was outside the door, and how they could charge themselves. When I was done, I said goodnight to my new assistant before crawling into bed. With my task complete and my exhaustion settling in, I was out within minutes.