

## Chapter 50 - System Research I

After slotting the SPG-01 shard out from my neck and carefully placing it into its protective case, I took a moment to stretch out and knead the tension from my neck muscles.

The night had been consumed by an intense netrunning study session, guided by Kill Joy's digital avatar, leaving me feeling a bit stiff from hours of near-static posture.

Glancing over the System Notifications to see the progress I had made, a smile instinctively crept across my face, reflecting the satisfaction and accomplishment of a long, productive session.

[System]: 400xp gained for [Programming] Skill.

[System]: 900xp gained for [Quick-Hacks] Skill.

[System]: [Quick-Hacks] has reached Level 1.

[System]: 500xp gained for [Netrunning] Skill.

[System]: [Netrunning] has reached Level 2.

[System]: 500xp gained for Intellect Attribute.

[System]: Intellect has reached 3.

The gains in my [Programming] skill had noticeably slowed after hitting the first Perk-point milestone, as was customary, yet both [Quick-Hacks] and [Netrunning] had made some really impressive strides in progress over the past few hours.

Although the lessons hadn't *specifically* focused on [Netrunning], as that was part of the third—and final—guided lesson, the skills in [Programming] and [Quick-Hacks] naturally contributed to it, given their extensive interconnection.

I still found myself in a bit of a dilemma over which [Programming] Perk to pick.

[Programming Maestro] was particularly appealing, especially after this lengthy session, where I frequently found myself bogged down by challenging problems with my early programming journey, that the Perk would likely resolve immediately. However, I was still holding off on making the *final* decision and allocating the Perk point, wanting to be absolutely sure of my choice.

I was aiming to align my [Programming] Perk choice with both the [Quick-Hacks] and [Netrunning] Perk choices as well, anticipating significant time navigating cyberspace in the future.

Despite not aspiring to be a dedicated netrunner, I was acutely aware of the significance of the digital realm within the more clandestine layers of Neon Dragons' world. Having finally reached Level 1 in [Quick-Hacks] and unlocking its Perk Tree alongside the others, I had all the parts required to plan and devise a comprehensive netrunning build for that trifecta of Skills.

I was trying to make sure that my preference for [Programming Maestro] was not merely a fleeting interest but a calculated decision reflecting my broader cyber activities instead.

Perk points were exceedingly valuable, so I couldn't afford to squander any at this time.

Pulling up the Perk tree for [Quick-Hacks], I started to delve into my future options.

[Data Spike] [Requirement: Level 3 [Quick-Hacks]]

*Nothing beats a good ol' fashioned brute-force attack!* You gain the ability to break into the target's ICE, with a direct and forceful hack, provided the subroutine or segment deployed consumes no more than one-third of your device's peak RAM capacity. The maximum level of ICE breachable in this fashion is based on the knowledge-level of the Skill.

[Spiritus Machina] [Requirement: Level 3 [Quick-Hacks]]

*Be a literal Ghost inside their systems!* You gain the ability to code your programs and Quick-Hack subroutines with additional stealth layers, allowing them to remain undetected for far longer than usual.

[Subroutine Synthesis] [Requirement: Level 3 [Quick-Hacks]]

*Like a programming Alchemist!* You gain the ability to rapidly combine parts of existing subroutines into unique, one-time-use subroutines that would otherwise not compile. The maximum complexity of the created subroutine is based on the knowledge-level of both your [Quick-Hacks] and [Programming] Skills.

[Segment Mastery] [Requirement: Level 3 [Quick-Hacks]]

*Just cram a bit more into it... Just a tiiny bit more... Perfect!* You gain the ability to add one additional (Subject), (Verb) or (Adjective) from your library into any quick-hack attempts, regardless of limitations imposed by your device or the overall complexity of the quick-hack.

Taking the Perk descriptions at face value for now, trying to keep my emotional response to them to a minimum—despite my almost feral *need* to gush about the Perks—, I quickly opened the Perk tree for [Netrunning] as well, to get a more comprehensive view on all the future Perks available to me for the netrunning part of my initial build.

[Echo Trap] [Requirement: Level 3 [Netrunning]]

*The cyberspace hunter-class Perk!* You gain the ability to deploy quick-hack segments or subroutines as static traps directly in cyberspace, bypassing the need for any external devices for these tasks. These traps utilise and generate only a fraction—one tenth—of their typical RAM and heat when active. You can dismantle these traps remotely with a mental command, irrespective of your location or line of sight.

[Heat Dump] [Requirement: Level 3 [Netrunning]]

*Aggressively warm!* You gain the ability to offload a portion of your accumulated neural-heat onto selected targets currently influenced by your quick-hacks within cyberspace. The efficiency of heat transfer and the capacity to target multiple adversaries are determined by the knowledge-level of the Skill.

[Cyberspace Thief] [Requirement: Level 3 [Netrunning]]

*Did that bitch just steal my subroutine?!* You gain the ability to attempt and snatch a random quick-hack subroutine or segment from any target currently affected by one of your quick-hacks in cyberspace. To successfully annex these digital assets, your device must have sufficient storage space available—equal to or exceeding the quick-hack's size.

Additionally, your system must have available current-capacity of at least half the necessary RAM and heat capacity for immediate use of the stolen quick-hack.

[Spectral Scanner] [Requirement: Level 3 [Netrunning]]

*Give me just **one** ping...* You gain the ability to use your device's specs to scan cyberspace around you for hidden entities, objects or daemons. The range and level of detection is determined by the knowledge-level of the Skill.

Browsing through the array of Perks, my excitement spiked at the numerous paths available for exploration, yet, predictably, so did my indecision, given the tantalising array of Perks I longed for but couldn't simultaneously possess.

Although I was still some distance from reaching level 3 in both [Quick-Hacks] and [Netrunning], laying out all the options like this solidified my choice of Perk in [Programming].

The unveiling of the new Perks didn't sway my initial preference for [Programming Maestro], with the possible exception of [Cyberspace Thief], which tantalised with the prospect of acquiring subroutines and segments through less orthodox means.

However, this alternative approach to accumulating resources didn't fully diminish the appeal of [Programming Maestro] either; if anything, it highlighted its value in refining and enhancing any acquired codes even further, ensuring my path remained clear and my decision firm.

In recent days, I'd dedicated a considerable amount of time to mulling over which [Programming] Perk to choose, narrowing it down to two prime candidates: The previously mentioned [Programming Maestro] and [Debugging].

The latter offered an appealing safety net for any coding challenges I might encounter while creating quick-hacks, along with the chance to earn extra credits by debugging others' work.

However, after much deliberation, I leaned more towards selecting [Programming Maestro].

This choice promised a superior level of creativity in coding, applicable not *just* to quick-hacks but also to standard programming tasks and potentially unforeseen future needs, making it the more enticing option for my current goals.

Selecting the [Programming Maestro] Perk felt like an ideal initial step to bolster my burgeoning programming and netrunning abilities. This versatile, entry-level Perk seemed poised to elevate nearly every facet of my coding journey.

It held the promise of enabling me to review others' code more insightfully, spot alternative approaches, and crucially, overcome obstacles like the ones that had stalled me during the entirety of tonight's lesson with Kill Joy.

With [Programming Maestro] in my toolkit, I anticipated a substantial boost in my experience grind efficiency—possibly up to 30-40% more per hour with Kill Joy looking over my shoulder, thanks to bypassing the long-winded, convoluted problem-solving I had been doing until now.

Sure, the resulting code might resemble a patchwork akin to Frankenstein's creation, and coding purists might balk at my methods, but my immediate priority was creating *operational* code swiftly, not writing the cleanest, most effective code possible.

Armed with the newly gained insights from the two additional Perk Trees, I made the decisive move to lock in [Programming Maestro] as my chosen Perk, ready to embrace its potential for my programming journey going forward.

[System]: *[Programming Maestro] (Programming) Perk acquired.*

'Good start for my research today! Already unlocked to more Perk trees, used up all of my existing Perk points and can start working on theory-crafting my build for netrunning purposes... Definitely a good start,' I thought to myself with a satisfied smile on my face, while assuming a more comfortable position in bed.

I glanced at the clock and noted that I had about thirty minutes before Gabriel's alarm would go off. Not wanting to disturb his rest, I decided to use this quiet interlude for much-needed relaxation time.

To keep my thoughts from drifting back to the complexities surrounding Aki and our uncertain future interactions—a topic I wasn't willing, nor ready to delve into just yet—I turned to [Meditation]. I found it to be an effective way to centre my mind and maintain focus, while also grinding some simple experience on the side.

As I delved deeper into a meditative state, I listened attentively for the familiar sounds of Gabriel beginning his morning routine. This peaceful moment of tranquillity was a welcome break, allowing me to gather my thoughts and prepare for the research-heavy day ahead...

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Stepping into the shower after my usual morning workout routine a couple hours later, I quickly went over my morning gains, before I'd start thinking about my research that I had planned for the day.

[System]: *300xp gained for [Contortion] Skill.*

[System]: *200xp gained for Reflex Attribute.*

[System]: *800xp (+400xp Bonus) gained for Body Attribute. Available Bonus left: 300xp.*

[System]: *400xp gained for [Athletics] Skill.*

[System]: *600xp (+300xp Bonus) gained for [Stealth] Skill. Available Bonus left: 0xp.*

[System]: *400xp gained for Edge Attribute.*

[System]: *300xp gained for [Acrobatics] Skill.*

I had gone quite hard on the exercises again today, figuring that I wouldn't have too much use for my energy today, aside from grinding out experience either way. I still would have to find a more sustainable increase in difficulty, as the amount of extra effort that I was currently putting into my workouts compared to before, really didn't result in the bump in experience gains I had initially hoped for.

But for now, it would do.

Pulling up the whole [Skills] interface, I quickly checked for any changes and to get an idea of what I might still have to unlock today.

There was a veritable ocean of Skills available in Neon Dragons, and, with the G.E.M.A. System capable of creating entirely new ones, which had never existed in the game itself, I was bound to end up unlocking a ton of new Skills today that I'd have to categorise and somehow turn into usable parts of my life going forward.

I discovered two new entries on my [Skills] list that weren't there before, leaving me momentarily puzzled until I remembered the overlooked System Notifications from that complete disaster of a data-collection mission.

The two newly unlocked skills were [Climbing] and [Jury-Rigging].

Identifying the origin of [Climbing] was straightforward; I must have earned it while descending from the apartment building I had used for recon on the netrunner and her crew, deliberating the most strategic approach to get to the shard.

When I had gained [Jury-Rigging], however, took me a moment longer to deduce.

I ultimately figured it had been awarded for fashioning an impromptu projectile with the shards, debris, and stones I had collected and honed using the [Sharpen] Perk.

It governed anything one might consider Mac-Gyver'ing, so to speak.

Any jury-rigged solution to a problem or jury-rigged piece of equipment would be part of this Skill. It was a restricted-hybrid crafting Skill, based on the Intuition and Tech Attributes.

Just like the other crafting Skills I had unlocked, such as [Cooking] and [Poison], [Jury-Rigging] came with one of those sweet "first-time" bonuses, which explained why I snagged it for something as basic as crafting makeshift projectiles from alleyway trash.

Probably wouldn't get another experience drop for the same exact "craft" going forward, but hey, it was worth a shot in today's deep dive into Skills either way. Level 0 Skills were quite generous with what they awarded experience for, after all.

'So, *what's on the to-do list?*' I mused, scrolling through my mental catalogue of game Skills I knew I had to nab. Some of the heavy hitters like [Engineering], [Cybernetics], [Machining], or [Genetics] were extremely far out of reach for now, so they were benched in my brain's "get to it eventually" section.

A section I really hoped wouldn't grow too large, but was likely going to end up including a significant portion of today's research.

Then there were the "everyday" Skills I figured I'd stumble into unlocking without much fuss, stuff like [Dancing], [Singing], and [Drawing]. I didn't quite see the point of them yet, but I might as well bag 'em while I was already at it.

But when it came down to the real deal, the really *useful* Skills I could actually get my hands on right away, pinning down a list was proving to be a bit of a brain teaser.

As I racked my brain, I tried to channel my inner detective, 'Okay, Sera, **think!** You've got [Tailoring], [Lip-Reading], and [Tracking] on the must-have list, but there's a whole bunch more floating around in the noggin'. Time to dig deep!

I remembered pouring over the game's Skill list for hours on end, but now that I actually needed to recall specific Skills, my brain was playing hard to get. Gradually, though, the mist in my mind started to clear, and bits and pieces from the game's vast Skill repertoire bubbled to the surface.

"Ah, that's right! FelineOfTheNorth and those nifty economy builds!" I recalled, a lightbulb flicking on in my head. 'For that, I'd need stuff like [Accounting], [Business], [Cryptography], and [Gambling], though... Not sure how I'm gonna pull off the last three just yet, but [Accounting] should be a piece of cake. Just need to start jotting down my expenses and earnings, and I'm set to unlock it in no time.'

I also had my sights set on a whole array of scientific Skills, such as [Physics], [Mathematics], [Chemistry], [Biology] and similar, but right now, they felt as elusive as a mirage. In the game, these Skills were tightly gated behind fairly high Intellect levels as well, which hinted that I might not even be able to snag them even *if* I stumbled upon the right information shard.

It was a bit like knowing there's a treasure chest, but not having the key, nor knowing where the chest even was in the first place. Gold Roger would be proud of the non-descript nature of my search.

There were also a myriad of crafting Skills that ranged from simple armour crafting, such as [Light-Armour], [Medium-Armour], [Heavy-Armour] and [Super Heavy-Armour] over weapon crafting and alterations, to cybernetic and bionics crafting as well, if I somehow managed to get myself some seriously sophisticated equipment and a lab.

They, alongside the science-type Skills, were like the ultimate crown jewels on my "Oh, I so want these right now" list. Yet, at the same time, they were also perched right on top of my "Yeah, not happening anytime soon" list.

Talk about shooting for the stars!

They were definitely getting filed under "dreams for later," seeing as they demanded a hefty combo of Attributes, creds, and street rep just to dip my toes into the required knowledge pool, not to mention the gear and tech to actually fully dive in and make proper use of them.

For the time being, my crafting ambitions were snugly tied to [Tailoring], [Medicine], and maybe even [Alchemy]—that is, if I could luck out on snagging the more esoteric ingredients the last one called for.

Both [Medicine] and [Alchemy] were intriguing and exceedingly useful in their own rights, however. The former was all about conventional, science-backed medicine, while [Alchemy] dabbled in the more mystical side of Neon Dragons, offering effects that were nothing short of miraculous.

I vividly remembered this one elixir from the game that was crafted using [Alchemy].

It had been called the [Wyvern-Lore Elixir].

It was an extremely hot commodity for players because it boosted your experience gains by a certain percentage while active. The catch? It slashed your max health by a similarly impactful percentage, depending on the elixir's quality.

It was a risky choice, especially for me since I didn't have the luxury of respawns or reloads, but for those grinding tough, expensive-to-level Skills, or just after a general level boost, it was like striking gold.

A little twinge of frustration at the continuous thoughts of "have to shelve those Skills for later" nipped at me, but I brushed it off.

Today wasn't just about chasing down known Skills; it was about diving headfirst into the G.E.M.A. System's self-created labyrinth. I wanted to unravel how it interpreted the world around me and uncover any new, unique Skills it had dreamt up for this reality. Skills that were never part of the game but could be just as pivotal in my journey here.

To get a head-start on my Skill unlock journey, I opted into starting right away, as the pool of knowledge about pre-existing Skills inside my brain seemed to be starting to dry up.

"Just a small-town girl... Living in a lonely world...!" I started belting in the shower, figuring a good ol' classic from way before my time would do just nicely to unlock the first of many Skills today: [Singing]...

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Three hours later, currently deeply engrossed in my attempt at unlocking [Tailoring], as I fumbled with attaching strips of cloth to the work-shirt I'd wrecked during yesterday's data-collection fiasco, I took a mental inventory of the day's achievements.

My struggle with the needle wasn't a descent into madness, that screamed for distraction—No, no! It was a *deliberate* pause to reflect on my progress.

Yeah, that's it. A deliberate pause.

The tally was already quite impressive, considering the short amount of time I had spent on the research so far: [Singing], [Dancing], [Drawing], [Tracking], [Lip-Reading], and [Accounting] were now part of my skill set, alongside a deeper understanding of the System's mechanics.

*'First and foremost, to gain experience, more than 50% of any given action needs to be completed,'* I reiterated for myself. It was something I had realised immediately upon trying to unlock [Singing] in the shower earlier that day, as simply repeating the same few refrains or chorus' did nothing to give me the experience drop to unlock the Skill. Furthermore, this had been confirmed again later, when I had tried to figure out how repeated experience drops *actually* worked.

*'Figures that just repeating an action isn't enough. I gotta step it up each time, plus clear the halfway mark of the task,'* I pondered, struggling to tighten the thread without causing a

catastrophic tear for the umpteenth time, my frustration at a point where I was barely holding on. *'You'd think my skills in [Slicing] might lend a hand here. But nope, the System's having none of that nonsense, I guess. No cross-skill shortcuts allowed for this one... [Tailoring] and [Slicing] might as well be worlds apart.'*

The repetition game with singing the same song had been enlightening, if a bit frustrating.

The System was a tough critic; without changing something up—the pitch, the rhythm, or adding a little flair here and there—it just turned a deaf ear. It was clear: Doing the same old thing wasn't going to cut it. This System demanded innovation, creativity, and a little bit of elbow grease.

Unlocking [Singing] had unironically been something like hitting the jackpot in terms of figuring out how to game the System's experience mechanics.

It was a narrower skill, making it easier to test out my theories on skill acquisition. Before, when I was tackling broader skills like exercise routines, things were too spread out to make any solid guesses.

But [Singing]? It was a goldmine for this type of micro-experimentation.

Using what I learned from my vocal adventures, I threw myself into [Dancing], applying the same principles. And guess what? It paid off.

The theory that over half the action needed completion and that each attempt had to have some sort of twist to it for additional experience gains held up. [Dancing] confirmed it. But it also taught me something extra: Not just *any* old change would net me that sweet, sweet XP.

My foray into [Dancing] was like a crash course in gaming the System's skill development criteria as well. I wasn't born a dancing maestro, but I've had enough rhythm in my veins to tell if I'm totally out of sync. This innate sense of beat was a key ally in deciphering what kind of modifications the System would count as *meaningful* for repeated experience gains.

Here was the trick: It wasn't about random alterations to my dance moves. I had to enhance my routine, not just switch it up aimlessly. "Enhancement" was a bit of a vague term, I admit, but it was the best way to describe the process given my limited understanding of the System's internal evaluation mechanisms.

My experiments were telling: Just adding more steps willy-nilly, even if they threw me off-beat, didn't cut it for the System. No XP for that. But when I extended existing steps, keeping the rhythm intact, the System seemed to acknowledge these as legitimate improvements, or alterations, rewarding me with experience points for essentially doing the same dance but with a bit more finesse.

Unlocking this insight felt like finding a cheat code for my workout routine.

It dawned on me that I could devise an evolving, incrementally more challenging exercise plan, which would enhance my Skill and Attribute gains more efficiently each morning.



Instead of doubling my efforts, which also, invariably, met the System's criteria, I realised I could simply tack on an extra push-up or sit-up here and there. This gradual escalation, as long as the System recognized it as a "significant change," should net me consistent experience boosts without the need to drastically increase my workload, as I had been doing for the past few days.

This approach wasn't just a theory; it had practical applications across different Skills, as evidenced by my initial foray into [Drawing].

Starting with crude sketches of everyday objects and progressively refining the details with each re-draw—like shadows, perspective, and lighting—proved to yield successive experience drops, mirroring my experiences with [Dancing].

Each improvement, no matter how seemingly insignificant, was a step toward mastering the Skill, solidifying the notion that strategic, incremental changes could significantly impact my progression in the System's eyes.

Armed with this newfound strategy, racking up the initial 700 experience points needed for the Level 1 knowledge download seemed like it was going to be a breeze compared to my previous brute-force approach.

Now, I could cycle through the same action that had unlocked the Skill for me in the first place, seven times, each time tweaking a little something here and there, rather than mindlessly repeating the same motion and hoping for the System to be kind enough to finally let me level up.

This technique was not only going to make the process more engaging but seemed to trick the System into thinking I was constantly innovating, making those first steps towards unlocking a Skill a lot smoother and, frankly, more enjoyable.

With these groundbreaking insights under my belt, I also bumped into some limitations.

Not all Skills seemed to play by the same rules.

Take [Lip-Reading], for instance, a Skill I managed to snag while making a targeted supply run to the 31st floor, avoiding any other detours below my home-floor to steer clear of any unwelcome encounters.

This skill didn't lend itself to the same tricks I'd used to finagle extra experience drops from the System. It turned out to be one of those abilities that was likely going to demand constant practice to improve, without much wiggle room for creative adjustments.

My conclusion, after half an hour of trying different approaches, was that there wasn't much I could tweak in my lip-reading method to game the system for more experience.

As I reflected on my recent session with the [Accounting] Skill, I realised that finding ways to iterate and improve in this area was going to be a similarly challenging endeavour.

The nature of accounting didn't particularly lend itself to much creativity in terms of altering methods. It was pretty straightforward—documenting income, expenses, and maybe working out a budget.

So, at this point, my [Accounting] Skill had done just that, offering a clear picture of my current financial standing.

After my trip to pick up supplies, my digital wallet was feeling lighter, with just 130 credits remaining from my modest savings. The expenditure of 30 credits had been necessary, though.

I had stocked up on essentials for [Tailoring]—thread, needles, fabric—and also grabbed some basic chemicals and pharmaceuticals. My hope was that these purchases might help me cobble together something intricate enough to also kickstart my [Medicine] Skill.

But as it stood, my budget was a simple, static record—not much room for the kind of dynamic changes that had helped me with the other Skills.

During my trip, I had also managed to unlock [Lip-Reading] while also on the lookout for [Alchemy] supplies, although the latter proved fruitless.

It dawned on me that Rockefeller Inc's shopping floor wasn't exactly prime territory for sourcing the more esoteric ingredients needed for [Alchemy].

Reflecting on it, it wasn't much of a surprise either.

Rockefeller Inc, with its military-first ethos, didn't seem the type to dabble in Neon Dragons' mystical elements—not until they could find a way to commercialise them for mass consumption, that is.

Once they cracked that code, I wouldn't be surprised to see Rockefeller Inc branching into alchemy supplies as well. After all, the super-heavy, gravity-like allure of credits had a way of bending even the most staunchly martial corporations.

During my recent trip to the 31st floor, I also attempted to gain some of the last experience I required for my first level-up in [Negotiation], but I quickly realised that the area was more akin to a regular store than a bustling bazaar.

The store clerks there were pretty rigid, sticking to the listed prices without any room for haggling. It made me think about Misha, that enigmatic and generous Gryplik from whom I had purchased my Operator equipment at a significant discount.

*'A visit to Misha's Emporium might not only be pleasant but also beneficial to finally make some headway on my [Negotiation] skill,'* I pondered, recalling her kind demeanour.

However, with no pressing need for anything from Misha's Emporium and the priority to repay Gabriel in the forefront of my mind, I had to acknowledge that my current credit balance was more of a fleeting resource than a fund for personal indulgences.

As I finally managed to secure another piece of fabric over one of yesterday's numerous tears, I was greeted by the familiar, eagerly anticipated chime inside my head, signalling the unlock of a new Skill.

"About fucking time!" I exclaimed, somewhat exasperated, as I tossed the shirt, needle, and thread across the kitchen table. "I'm not exactly thrilled about levelling this Skill until I hit the first knowledge download," I grumbled to myself, realising I'd need to repeat this tedious process at least six more times for some System-endorsed guidance.

Nonetheless, I couldn't really gripe about how the first part of today's deep dive into research had turned out. There were still plenty of hours left before my appointment at the Arkion Dojo, and an overwhelming list of Skills to explore and potentially unlock.

My mind started to wander, trying to prepare another list of things I wanted to try out next, as I took a much needed break, *'Just what kind of Skills could the System have included that hadn't existed in the game...?'*