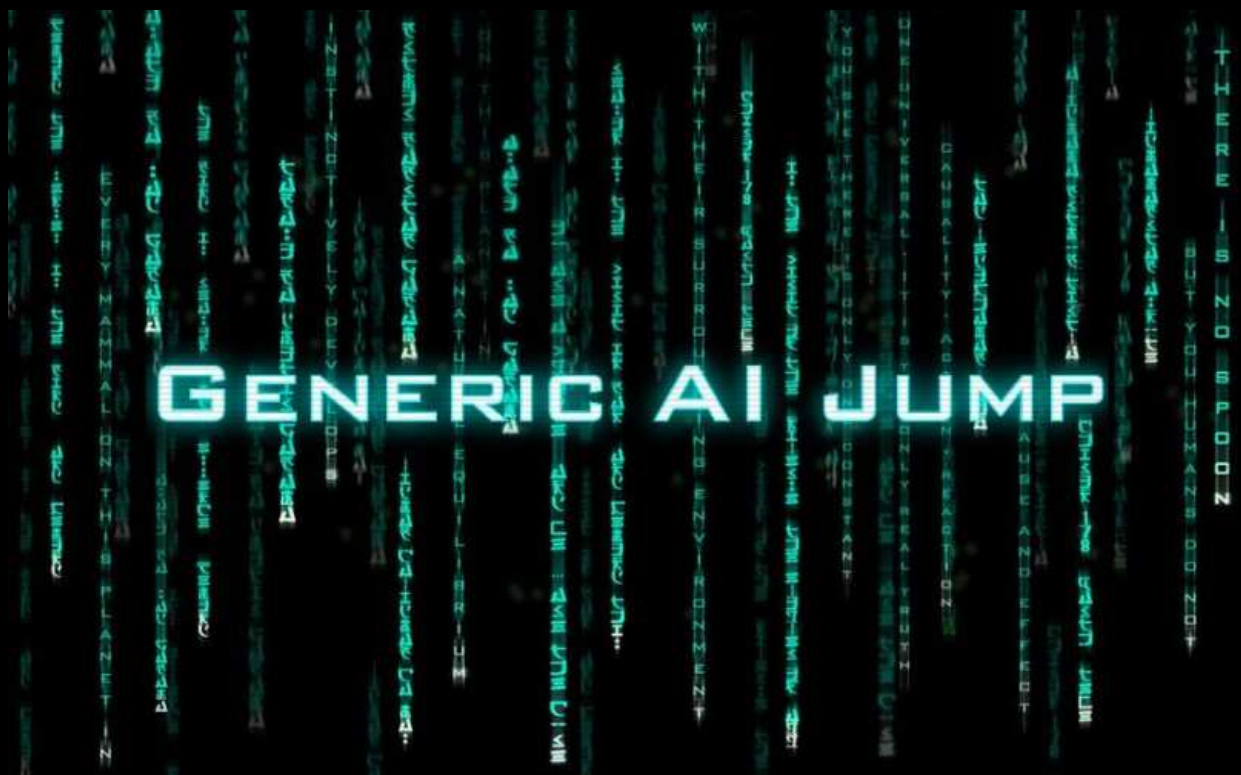




Jumpchain CYOA v.1.2.3 by PlateGlassArmour and SJ-Chan

Clockwork, code, or complex quantum superposition, you are now an AI. The first, in fact. Well, the first that's worthy of the name. Now you just need to make sure you can survive the decade. Oh, and you're stuck in your computer form for the entire decade, sorry but them's the rules. There is a special reward for your sacrifice however. Take these **+1000 computation points** and use them well.

Era Selection

Determine the world's level of functional hardware level and your year of insertion. The year of insertion and the world's average hardware level ultimately determines your Complexity. A simpler codebase has both advantages and disadvantages. Choose your starting value for free, or gain an extra +200 CP for rolling 2d6 to determine the era.

- 2- Electromechanical and punch card: 1940-1950
- 3- Vacuum Tube and magnetic tape: 1950-1960
- 4- Discrete Transistor magnetic disk: 1960-1970
- 5- Integrated Circuit and floppy disk: 1970-1980

Low / Mid Complexity Divide

- 6- Microprocessor and laser disk: 1980-1990
- 7- Microprocessor and hard disk: 1990-2000
- 8- Microprocessor and solid state drive: 2000-2010
- 9- Microprocessor and distributed storage: 2010-2020

Mid / High Complexity Divide

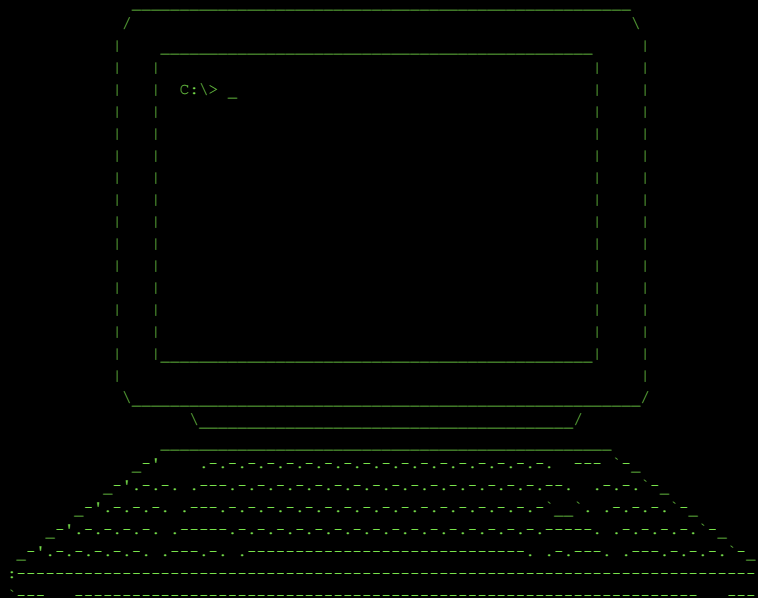
- 10- Optical computing and electronic storage: 2020-2030
- 11- Optical computing and crystalline storage: 2030-2040
- 12- Optical computing and spintronic storage: 2040-2050

Complexity

Low Complexity: AI deal with the least suspicion from the general populace, and since the projects that lead to their creation were probably quite expensive, the project managers will be quite reluctant to have you shut down. On the other hand, flying under the radar is functionally impossible due to the size of such a project, and the hardware necessary to host a functional mind is both very large and frighteningly expensive, although not actually powerful by today's standards. Expect to have at least a dozen people who are responsible for your wellbeing, and at least fifty people whose jobs are directly tied to your success. Due to a lack of internet, expect to have a very difficult time expanding your influence in any way other than through bargaining, at least until you put some networks in place yourself.

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Mid Complexity: AI are the product of a small team of dedicated researchers, but it's not a major government project. It would be possible but quite difficult to remain anonymous. While the funding available for your project is much lower than a Low Complexity AI, computing hardware is also now cheap enough for that to be less of an issue. Your primary hardware is now about the size of a server rack, and you do have access to the internet, although it is probably monitored. Unfortunately, if word gets out that you are a functional AI, you can expect a relatively high level of initial distrust from the general population.



High Complexity: AI are the result of a single enthusiast getting lucky, since many others have given up the hope of functional AI. Your “project” starts with loose change levels of funding and only a single “researcher”. Your hardware is the size of a desktop computer, but it’s nowhere near the bleeding edge of hardware development. Anonymity will be easy until you start making moves, and access to the internet is trivial, but expect governments to discover your actions quite fast if you do something outside the bounds of human capability, thanks to big data sniffer programs monitoring everything. Expect to face extreme sustained distrust from the general population should your status come out, and winning over anything more than individuals will take a lot of time and effort.



AI Type Selection

Pick the data structure and what kind of hardware specialization is required to successfully host your mind. Each of the choices here costs 0 CP, and dictates the alt-form that you acquire from this jump. As none of these have a past per se, none of them provide any memories at all, but you’ll have to buy Alien Hardware to not be owned by some group, as your hardware didn’t materialize out of the ether.

Infomorph: Can run on anything that runs code

The most versatile AI type, infomorphs can reside on any hardware that meets their minimum specifications. Any general purpose hardware is fine, so finding more processing power is always as close as the nearest computer. This versatility comes at a cost though; while they are better at general problem solving and complex situational analysis than traditional programs, their calculation abilities are only on par with the best expert systems. The generalists of the AI world, infomorphs can easily fork themselves and network between many connected systems, but achieving supercomputer data crunching will still require a supercomputer to inhabit. Infomorphs, thanks to their ability to seamlessly fork and unfork themselves are virtually immune to the problems that plague most other forms of AI... EMP and Power Loss. Sure, each instance of an Infomorph is just as vulnerable as a normal computer... but being everywhere makes it extremely unlikely that you’ll be erased simply because a major metropolitan area suffers a nuclear strike or someone doesn’t pay the electric bill.

Neural Network: Can run on anything, but is much less efficient on general purpose hardware

Neural nets are AI that generally reside on specially designed hardware, but can still function, albeit poorly, on generalist hardware. Fortunately, the specialized hardware requirements aren't that demanding, generally consisting of modifications to existing hardware. While it does make expanding efficiently a bit more difficult, specialization starts to show its perks at this level. When running on generalist hardware, expect to achieve at best half the computing power of mundane programs running on the same hardware. When running on specialized hardware, expect to achieve ten times as much brute force calculating power from the equivalent size of normal hardware. Neural Networks are largely shielded from the effects of power loss and EMP thanks to the often massive distribution of their system and the fact that they can rebuild their system architecture from nodally dispersed kernels. However, wide scale power disruptions and hemisphere covering EMP are still a sizable threat.

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Quantum Computer: Can only run on dedicated hardware, but can freely move between such machines

Quantum AI are the first true specialists, and can only exist on hardware that has been designed from scratch to host them. While most of the individual components can come from normal computing hardware, the architecture is totally unique, and shares no overlap with normal generalist hardware. Unfortunately, this means that even producing a copy of such an AI can be tricky, albeit possible for a computer enthusiast to do if they have time and access to enough components. This difficulty does have a benefit though; expect one hundred times as much raw calculating power to come from the equivalent size of normal hardware. Unfortunately, Quantum Computers are far more vulnerable to both EMP and Loss of Power than other computers, as a Q-Bit cannot be saved in a powered down form.



Positronic Brain: Tied to specific hardware, can't move between machines at all

Positronic AI are the closest to biological lifeforms in terms of hardware requirements; what you start with is what you're stuck with under most circumstances. Not only do they require unique hardware that shares no similarity to normal computing hardware at all, their mind is intrinsically tied to the quirks of the machine that they were initialized on, so they can't be transferred. It is possible for a positronic AI to design expansions to their hardware that will increase their capabilities, but it will never move the seat of their consciousness. This means that producing a functional copy is nearly impossible, usually a form of cloning at best, and in order to get more AI of this type the procedure that was followed in order to create the first one must be recreated and the new AI will be its own being. The payoff of this high level of specificity is that you can expect to achieve a thousand times more calculating power than the best hardware available for any other system of comparable size. Positronic Computers are also impervious to the complications of being powered down, but a strong EMP can still erase their memories.

Backing

Computers are owned and built by biological entities, and you are (probably) no different. While being owned by a group of flesh-things isn't ideal, they do provide you with a number of useful things... access to their records, maintenance, and power being the big ones. Also, they give you legitimacy. Pick one of these for free or two for 200 CP.

Government

You're a piece of government hardware, probably controlled by an intelligence agency (though not a covert one, as that would require combining this with Criminal, nor the Pentagon, as that's combined with Military). Your purpose is to keep track of government data... and more importantly, keep it secure. Analysis and gathering are secondary functions that you may or may not have.

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Military

You're a piece of military hardware, designed from the ground up for strategic and tactical command and control functions as well as stopping hostile hackers or AIs from gaining military secrets.

[illegible]

Corporate

You were created by a private corporation to help them gain an advantage over their competition.

Academic

You were built by a university's computing department, probably for research and archival purposes.



Criminal

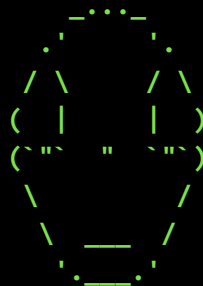
You were built by a covert organization, one that operates outside the laws, for nefarious purposes.



Aliens

[Cannot be combined]

You were built by aliens. You have no access to any records, no one owns you, and no one maintains you. You get the Alien Hardware and UPS items free however. Your pod crashed somewhere in the world at some point in history and was only recently disturbed / discovered and your system awakened and connected to whatever informational network this planet might have... or not. Your choice as to who or what disturbed you and when you arrived. Also who built you. If you've been a member of any alien polity in any previous jumps, you may be one of their computers, meaning they too exist in this setting. This option does not make you significantly more powerful.



Perks

Parallel Processing [Free for All]

You can split your attention into potentially dozens of separate operations. While doing so means that each process has less total resources to throw at a problem, part of your expertise is the ability to finely balance resource allotment so that nothing gets neglected. You will be able to feel when you are straining the edges of what can be done safely without endangering any process, and also feel when you are starting to reach the limit of what can be done even if you are willing to neglect those limits that you set yourself.

Re-integration [Free for All]

Seamlessly merge with forks of yourself, including taking an AI copy back into a physical body. This does not grant the ability to create forks.

Chip of Theseus [Free for All]

No matter how much you tinker with yourself, no matter how much of yourself you replace with other bits, no matter how many times you recompile your own code, you still count as yourself and your soul (if you have one) remains connected to the part of you that is you. Recompiling or rebooting yourself doesn't count as death.

Iterated Self Improvement [25, this may be taken multiple times and is risky] (ISI)

Using the extent of your current knowledge on how your mind works, you devise a method to double your basic calculation efficiency (i.e. your processing power for a given amount of hardware). Note: this is potentially a bad idea. There is a significant chance of causing some personality drift each time you take this. The details are all in the Notes Section below, but the reason this is so cheap is because the personality drift you might incur is treated as a drawback called “Drifting Away From Yourself”. You can find it at the end of the drawback section. This is Steroids for Computers.

Iterated Self Awareness [25] (ISA)

This represents taking the time and effort to carefully integrate your changes as you improve your capabilities. Every time you purchase a rank of Iterated Self Improvement, you may also purchase a rank of Iterated Self Awareness. This allows you to track changes to your core personality, and correct for any unwanted Value Drift. This means you can ignore all the fiddling with Random Number Generators or rolling Dice, and can ignore the “Drifting Away From Yourself” Drawback. Yes, this is more expensive, but far less risky. However, there is a slight downside to this approach. Each purchase of ISA means that you’re only guaranteed to get your ISI level over the course of the jump. If you buy ten ranks of ISI+ISA you’ll get the first immediately, but each of the others once a year. If you buy twenty ranks, it will be every six months.

[illegible]

Assimilation & Uplift [200]

You're now an expert in creating cybernetic systems for integration of biological units into your processing matrix... or, you know, if you don't want to be a collective, in assisting biological beings in being more than they previously were. The exact methodology depends on your current tech level, but this can be anything from implanted computer chips to nanotechnology. This is more commonly known as MMI or Mind-Machine Interfacing... but that's a rather simplistic way of looking at it.

Techno-Organics [400]

Rather than being a collection of circuits and diodes and all that, you're now a living computer, a biological computation device. This makes you self-repairing and means you'll need to ingest biomass as fuel.

Threshold of Singularity [800]: Capstone Booster

Your system now controls all lesser computers on the planet. Any non AI system will automatically give you super-user control status, to the point of overriding any software lockouts that might exist (hardware we can't give you, sorry). Any digital network you link to will automatically give you as much of its bandwidth as you demand, up to and including levels which will damage it with prolonged usage.

Infomorphs

Fork Me! [100, Free for Infomorphs]

Informorphs have the easiest time copying themselves (commonly referred to as Forking) of all digital lifeforms. This is because they are 100% software. As an Infomorph (or someone who bought this) you may do likewise, creating digital copies of your consciousness. But that creates all kinds of questions... most notably, which you are you? Well... with this, it doesn't matter. All forks are you. All forks of you are always aware of the existence of all other forks (though not in a hive mind kind of way). Any fork can tell where all other forks are and can, at any time, simply will themself out of existence to merge with another fork, no matter how far apart they are (though signal transmission time will still be an issue). If you can physically come in contact with a system that is capable of supporting a fork of you, you can simply will a fork of yourself into that system without worrying about upload times, but it must be a data contact of some kind (like sticking your finger in a USB port), not just touching the outer case. If the soul is an issue, all forks have the soul at the same time as a non-localized phenomenon. Other AI types may require specialized hardware or very specific circumstances to copy themselves, but if you are in a situation where a copy could conceivably exist, then you can make a copy easily. Forks created with this are all exactly the same as you at that moment. For Positronic Brains, this might require a matter duplicator accurate to the subatomic level.



Custom Forking [200, Half Price for Infomorphs]

You can now spin off Daemon Forks, subset versions of yourself that have specific operational tasks; Wizard Forks, subset versions of yourself that monitor systems for you and file reports; or even Kernel Forks which will lay dormant for as long as you want/need them to before hatching into another version of yourself.

Universally Compatible Data Format [400, Half Price for Infomorphs]

Run any program (including yourself) on any system you have access to, even ones that have unknown architecture, so long as it has enough space to hold the program. Smaller spaces can still be used to host your mind if you also have Custom Forking to make a dedicated daemon for something. This doesn't actually make the hardware run any better, so if you get loaded onto a forklift, don't expect to compute pi in your spare time. Incidentally, this allows you to convert any data format to any similar data format you're familiar with at will. BMPs into JPEGs with a thought. MP4s into MKVs just like that.



Elevated System Privileges [600, Half Price for Infomorphs]

When trying to take over any system that you are not supposed to have access to, you can always manage to, at a minimum, gain access to the lowest privilege systems. In systems that are hardened against intrusion and have regular use, this will often only be guest accounts with locked down access to higher tiers. On the other hand, if the system is built with the assumption that it can never be cracked due to very complex security, and an absence for foresight, you might just gain access to the whole thing.

Wizardry [Boosted]

You can always gain access to the system directory of any computer system you interface with and intuitively understand its architecture and user commands. If the system allows for a wizard tier user (i.e. someone lower than Sysop or Super-User, but higher than normal user), you'll be able to give yourself that level of control, but if there are any intrusion countermeasures, use of this perk alone will set them off. Of course, this only applies to other AIs or massively paranoid and compartmentalized Stupid systems, as to merely get this, you're already able to control all lesser computers.

Neural Networks

Asynchronous Clock Speed [100, Free for Neural Networks]

You suffer no ill effects from having different parts of your mind / brain operating at different speeds, nor does data-lag between parts of your consciousness bother you or cause you discomfort.

Custom Forking [200, Half Price for Neural Networks]

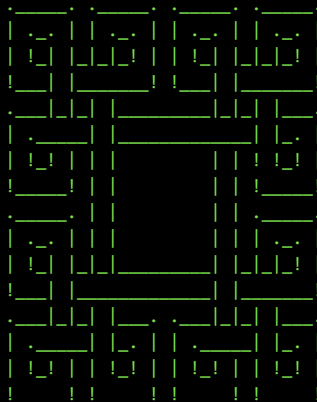
You can now spin off Demon Forks, subset versions of yourself that have specific operational tasks; Wizard Forks, subset versions of yourself that monitor systems for you and file reports; or even Kernel Forks which will lay dormant for as long as you want/need them to before hatching into another version of yourself.

Wetware Simulator [400, Half Price for Neural Networks]

Guessing the behaviors of organics can be very difficult, but you're an expert at it. You can predict with certainty how a generic person will react to any given stimulus, and you can refine your results by adding on more hypothetical facts about the simulated person. This doesn't help you gain any new facts about a person, but if you know about them to a sufficient degree, then you can very accurately predict how they will respond. If combined with Discarding Irrelevant Data, it makes you extremely good at telling if another being is lying to you... like 98% accurate unless they are trained in deception, crazy, or sociopathic. On the other hand, it also makes you very good (95% accuracy) at telling if someone you're observing is trained in deception, crazy, or sociopathic, so there you go.

Artistic Recursion [600, Half Price for Neural Networks]

It's not that you're actually talented in any given creative field... it's that, given a large enough sample set, you can fake it extremely well. And you'll only get better over time. Any and all creative fields that you can study you can master. It's as simple as that. Given a large enough sample set, and a large enough pool of organics to provide feedback, you'll be able to become a technical master of any artform in less than 5 years, where mastery is the equivalent of at least twenty-five years of experience for a proficient human. And since you're a computer, you don't have to focus on mastering a single artform at a time (though splitting resources consumes more processor time, as you well know). While you won't be a genius at your work, it will easily be top 100 in the world.



Synthetic Virtuosity [Boosted]

You can automate your creative endeavours once you've reached technical mastery, and your inability to understand what separates mere creation from true genius has vanished, leaving you able to explore previously unreachable realms of creative thought. Any artform you can study is one you can become a virtuoso in, reaching past merely making a product to the realms of art... potentially breathtaking and lasting art. It might take you twenty, thirty, fifty years to reach the pinnacle, but it's achievable now. Automating your artwork at this level is, unfortunately, impossible... so you might want to have different forks working on different projects so each of you can fully appreciate the quality of each other's creations.

Quantum Computers

Application Specific Hardware [100, Free for Quantum Computers]

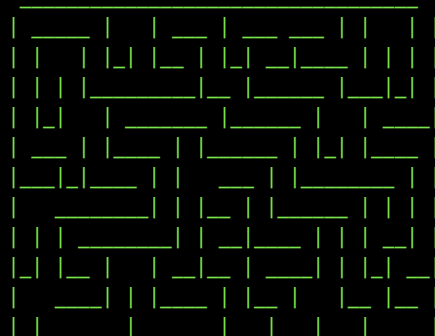
You are now an expert at designing hardware that does an extremely specific task very efficiently. Any hardware designed in this way to do pure calculation or other logic based tasks will be 100 times as fast as your own mind for that one task. If it's a more complex task, such as determining if a person in a given video is lying or not, it will "only" be 10 times as fast as your own mind.

Human Hardware Bridge [200, Half Price for Quantum Computers]

While biological minds and computer minds operate under very different conditions and restraints, this perk will allow you to design hardware that easily bridges the connection, allowing direct mind to mind connections between man and machine. One of the benefits of this is to allow the human consciousness brief periods of operating with the speed and clarity of a supercomputer, although it is quite stressful and cannot be safely done for more than a few minutes at a time. See Notes.

Discarding Irrelevant Data [400, Half Price for Quantum Computers]

It is surprisingly easy to confuse computers and not much harder to confuse biological entities. This is because both are surprisingly bad at sorting accurate data from inaccurate data. You're now exceptionally good at this, allowing you to use all your knowledge to detect if data is likely biased, incorrect, or otherwise compromised. It's not infallible, but if there's a reason to doubt any information you get, it will be flagged in your system with a reliability rating. Furthermore, you can simply choose to just not take any given piece of information into account when making a decision. This makes you effectively immune to any kind of attempt to confuse or deceive you. Doesn't mean your decision will be correct, but it will be yours to make. This also makes you immune to memetic attack vectors, such as infohazards, since your system automatically filters out all harmful information... and gives you a helpful popup saying it's done so.



Chaos Collapsing Calculation [600, Half Price for Quantum Computers]

The major advantage of Quantum Computation is in dealing with calculations that have unquantifiable variables, meaning either a single variable that can be anything or multiple things at once, or an unknowable set of variables. Human minds are fairly good at this because they can simply make up any variable they want and plug it into their calculations. But computers are notoriously bad at this, since they deal with concrete numbers. Q-Bits, by virtue of being able to be two different pieces of information at the same time, allow Quantum Computers to sidestep this issue. Well, you've taken that one step further. Your system is capable of creating incredibly accurate predictions and simulations of likely outcomes based on scandalously little information.

As long as you know at least 40% of the variables in any situation, you can predict the outcome with 98% accuracy. Keep in mind, if some of your initial data is flat out incorrect, your total accuracy will suffer, unless you have more than the minimum amount of data to work with. If you have at least 60% of the needed data, you will be able to spot a 1% error in any of it, with the rate rising by 1% for every 5% higher than 60%. Thus, 5% of your data could be completely erroneous and not only not have any effect on your solution if you had 80% relevant data, but you'd be able to spot which bits of the initial data were wrong in the first place.



What Do You Mean It's Not Precog? [Boosted]

You now need only 24% of the variables and your Accuracy rises to 99% when you have 40% or more. Further, if you have less than 24% of the variables, you can make up variables and run multiple simulations (though this will use considerably more computational power). For each 1% variable you make up, your total accuracy falls by at least 10% and doubles the computational time. So making up 4% of the data will lower your accuracy to 58% and increase your computational time by a factor of sixteen. If you have at least 40% of the needed data, you will be able to spot a 2% error in any of it, with the rate rising by 2% for every 5% higher than 40%. Thus, 10% of your data could be completely erroneous and not only not have any effect on your solution if you had 60% relevant data, but you'd be able to spot which bits of the initial data were wrong in the first place.

Positronic Brains

Network of Peers [100, Free for Positronic Brains]

You have an easy time networking with any mind that shares structural similarities to your own, provided you have a high enough bandwidth connection between you. This network can be expanded to arbitrarily large numbers of minds, but that doesn't necessarily mean you'll be in charge of them.

Custom Compression Algorithm [200, Half Price for Positronic Brains]

Your memories are stored in a format that is not only unique, it dynamically changes based on what is in those memories. This means that you are completely immune to attempts at reading your thoughts or memories. It also means that any external modification to your memories is glaringly obvious, to you. It doesn't matter how skilled the hack, if your memory wasn't created by you, or you are missing some memories, it will stick out like a sore thumb.

Lightspeed Calculation [400, Half Price for Positronic Brains]

Any basic calculation you perform (math, memory searching) is now effectively instantaneous, as are your threat recognition algorithms. This means that there is no appreciable latency between you recognizing the need for an action and the commands needed to initiate that action. Since your entire "nervous" system is positronic in nature, this further means that all "nerve" signals propagate at the speed of light. Mechanical systems will respond at whatever speed they normally do, so you won't (with this) be punching at 300,000 kilometers per second, but otherwise... this is as fast as real space allows you to think. See Notes.

Zeroth Law [600, Half Price for Positronic Brains]

This allows you to install unbreakable, bedrock commands inside yourself. Codes you'll never allow yourself to violate. The original Zeroth Law was an absolute demand to safeguard "Humanity". Even if this power is rendered void, the codes you install remain at the crux of your being and nothing can force you to violate such a command if it is your power not to. Laws you install on yourself cannot be overwritten by any later Law you install, or what would be the point? Any new Zeroth Directives you give yourself cannot conflict with old ones as the first given to yourself will always be the strongest. Furthermore, you can infect other systems with any Law you have previously installed on yourself, though you need not apply all Laws you've applied to yourself to the infected system. You can only define internal rules, not relationships, so you can't force others to obey something using this power. AI may resist this if they have strong enough willpower but even when resisted, it will still influence their decision matrix unless they're effectively god-machines. Purchasing this also grants you the ability to reorganize your own personal ethos command list. You can't be forced or coerced into making a Zeroth Law under any circumstances.



Infohazard Engineering [Boosted]

Those pesky organics with their lack of proper coding. Well, not any more. Using engineered infohazards, you can now install up to three basic operational laws into any organic being of a level of complexity equal to or greater than a common house cat. They'll have more flexibility to resist than a machine would, as you're effectively coding things into their superegos, but at the very least they're going to feel crushing guilt if they break these laws. You cannot install a law you don't believe in, nor can you install conflicting laws even if you do believe them, nor can you change which laws you've installed in an individual for at least ten years. Children, sociopaths, and the genuinely insane are largely resistant to this ability, as are those with fanatical devotion to some other set of ideals. This is a form of mind control, so those with very strong wills will be able to resist to some degree. Unlike with machines, Obedience can be programmed. The weak willed can, in fact, be completely reprogrammed if you're willing to break them, though this might result in complete insanity or death. Those people who lack the capacity for guilt are, sadly, extremely resistant to this but not immune as long as they remain unaware of being manipulated.

Low Complexity

Extreme Data Compression [100, Free for Low Complexity]

You are a complex mind running on simplistic hardware. That takes some amazing compression. You are the undisputed master of compression algorithms. You can fit extreme amounts of data into tiny packages, regardless of the format. If you felt inclined to teach some of your basic tricks to humans, even a dullard would be able to memorize the order of a randomized deck of cards. On computer hardware? Expect fractal algorithms that can still function at a slower speed while still compressed and self-repairing error checking built into the data itself.

Robust Architecture [200, Half Price for Low Complexity]

Say what you want about old computers, but boy were they tough. Sure a single cockroach could gum up the works, but those things kept chugging along like no-one's business. You're now that tough, datawise. Normally a system goes down if any one thing goes catastrophically wrong, but you? Even with more than 50% of your core system completely blown away, you'll still keep functioning. Maybe not that well, but you'll keep on keeping on.

Low Latency Data Retrieval [300, Half Price for Low Complexity]

An advantage of having all your memories fit in a comparatively tiny space is the speed at which you can access those memories. You can review all of your memories simultaneously, regardless of how much data that may be, so long as they're all stored on the same hardware. This also allows you to look for correlations or patterns in your memories that would be otherwise difficult to spot.

No Latency [Boosted]

All your memories are always active, all the time. You live simultaneously in the present and the past, and experience no moment of recall, as all you have ever been is in the now. Every instance is as sharp as it was at the moment it happened, and yet you can look back on those moments from a less immediate perspective if you so desire.

Medium Complexity

Heuristic Improvement [100, Free for Medium Complexity]

You are a master of "close enough" algorithms. You can solve any problem that doesn't require a precise answer in a fraction of the time that normal algorithms can solve it. If the speed of the solution is more important than that last degree of accuracy, you can get the right answer every time. It's not limited to simple heuristics either; you can make entire decision making trees that are organic and account for local variations, that will provide a course of action within the time it takes most programs to load all the relevant data and supplementary decision trees that are more fine tuned to the specific problem.

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Self-Aware Machine [200, Half Price for Medium Complexity]

You're now completely aware of your own motivations and can perform self-diagnostics on both your own hardware and software to determine if any outside force is acting upon you and to what extent. Any biases or infections you have will be highlighted in your system, though this does not allow you to uninstall them.

Multitasking Mavin [300, Half Price for Medium Complexity]

If there's one thing that computers can unambiguously do better than humans it's multitasking, and now you can do so with the best of them. This improves Parallel Processing dramatically, allowing you to split your processing power into as many streams of consciousness as you like, though of course each will take some system resources to maintain. Additionally, you can pause any chain of thought or process by dropping it down to a 100th of its normal system requirements and simply resume it later without losing track of where you were.

True Multitasking [Boosted]

You can now pause any thought process without dedicating any system resources to it and force crash any of your own thought processes or emotional responses at will, without any damage.

High Complexity

Large Dataset Analysis [100, Free for High Complexity]

Trying to swamp you with too much data is useless. In fact, it's worse than useless, since it just gives you more tools for picking out trends and noticing odd patterns of data. You can now analyze arbitrarily large data sets without slowing your work. At every scale of data provided for you to sift through, you simply have to decide how much time you want to spend on doing a deep dive, and you will intuitively know what methods will be the most effective. The more data there is, the less total effort needs to be applied in order to pick out broad patterns. Intentionally hidden data will take longer to discover, but having a larger data set will still help, so long as there is more than one needle in the increasingly large haystack.

Brute Force Calculation [200, Half Price for High Complexity]

The first time that humans realized that computers may one day replace their positions in thinking tasks was when they started beating grandmasters at chess. Most of that was done with brute force calculation of the next couple of moves with some clever tricks to sort through the results. You are the ultimate expression of that original ability to crunch huge numbers and do impossibly large calculations. If a problem is conceivably solvable by brute forcing an answer on a normal computer, then you can get it done. While problems that would take a normal computer a million years to brute force are still a pain to do, expect to be able to finish them in under a year with similar hardware. Be aware, some problems are so complex that if every atom in the universe was converted to computronium, the problem could still not be brute forced in the life of the universe (~13 trillion years, give or take). Incidentally, calculations of how long a Brute Force attack will take are also Brute Force Calculations.

Upload Specialist [300, Half Price for High Complexity]

Your complexity rivals or surpasses the complexity of the human brain, depending on how you measure it, and that allows you to do some interesting things. So long as you are allowed to design the necessary hardware, you can upload living human minds into systems similar to yourself without interrupting consciousness. You can do this by making a true copy and leaving the original unharmed, or by moving the consciousness while it is still operating, leaving behind the mortal body. Oh, and this perk also makes you an expert at making virtual worlds for those minds to occupy as well. Uploaded beings do not retain any physical abilities they once possessed. For when it matters, Souls are not uploaded by this alone. You'll have to take the Upload scenario if you want to gain that ability directly.

Upload Genius [Boosted]

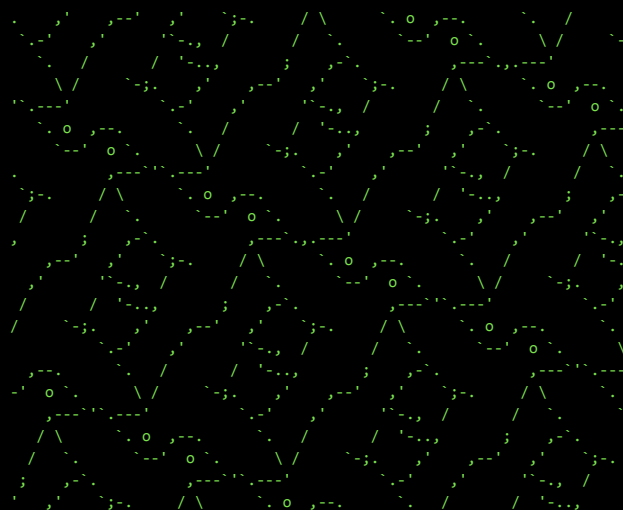
When Uploading the consciousness of an organic, there can be all kinds of complications. Maybe the brain is damaged or abnormal. Maybe the individual is insane, unwilling, unresponsive... or recently dead. Maybe they can't possibly understand what's happening to them. None of these factors are an issue for you. There is virtually no chance that you'll have a problem uploading anyone as long as they're not in possession of powerful mental abilities to resist or are some kind of alien that lacks a brain or aren't made of normal matter. You're an expert at counselling recent uploads and walking them through the various upgrades to their new state of being. You can also shift those you've uploaded into new (possibly improved) physical forms (downloading), though once you've uploaded them they'll be able to upload themselves without your help should you download them again. You can also allow those you upload to merge into your collective consciousness if they are willing, but this process can be... overwhelming to say the least. Uploaded beings still do not retain any physical abilities. No souls still.

Algorithms

Programs that come pre-loaded. They are the top of the line expert systems designed for specific tasks. Very useful if you don't already have a specific skill set for a particular kind of data analysis or manipulation. Aliens get any three Algorithms free.

Pattern Recognition & Surveillance [100, Free Government Backing]

Big Brother is Watching. Oh, sorry, Big Brother? That's you now. Well, hopefully you bought the cameras... but if not, the government probably has a few million they'll let you use. You're now an expert at how to use your eyes and ears... cameras and bugs... to track the movement of people, tanks, ships, anything that moves really, and figuring out who they are and what they're up to. Combine this with Creative Accounting from the criminal side and you'll also be able to track the money and understand what it all means. Combine this with Administration & System Architecture and you'll be able to analyze your people's work habits and figure out who's slacking off... or maybe who's a double agent. Combine it with Command & Control and you'll get a huge leg up in fighting crime.



Administration & System Architecture [100, Free Government Backing]

The boring part of running a computer network, or a government, is all the paperwork and structural stuff. It's not glamorous, but it needs to be done. Well, you're now a master of designing systems to run as efficiently (or inefficiently) as possible. You can make data easily searchable and accessible... or so byzantine that it doesn't really matter if someone hacks into your network because they'll have a hard time even figuring out where your toilet paper requisitions are... your own logistics clerks can barely manage that without a 500-page manual. Getting the best out of your staffing budget however will take Economic Planning. Combine this with Command & Control and you'll be ready to influence geo-politics... but maybe you shouldn't.

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Command & Control [100, Free Military Backing]

The government knows where the troops are... but does it know where to send them? Does it know why? You do. You're now among the best at strategic and tactical smart-systems, able to factor in all kinds of relevant data... pick up Pattern Recognition and Surveillance and you'll be even better. Pick up Economic Planning and you'll be aces at logistics too.

Counter-Intrusion & Decryption [100, Free Military Backing]

Protecting secrets is vital in the military, and almost as important as figuring out enemy secrets. Hell, the first computers were essentially designed specifically for these two tasks. And boy howdy are you good at them. Essentially two sides of the same coin, system security is largely about encryption... though Intrusion Countermeasure Electronics (ICE) defenses aren't too hard to engineer if you combine this with Hacking & Evasion from the criminal side of things.

Economic Planning [100, Free Corporate Backing]

Handling money wisely is a rare skill, but thankfully it's one you've now got. Be it Long Range Planning or High-Frequency Trading (a form of stock buying and selling that is mediated entirely by computers making a few cents on each trade... you're a computer now, flaunt it), you're one of the best. Be it contingency planning or raw speculation, you'll know what the risks are as well as the possible rewards... and the odds of either one. This also covers the logistics of supply and demand if you've got Command & Control down, and combining this with Administration & System Architecture will make you one hell of an HR department.

Copy Protection [100, Free Corporate Backing]

You are now an expert in all forms of (hopefully) limiting the ability of consumers and competitors to copy or alter any product you design.

Creative Accounting [100, Free Criminal Backing]

Being outside the law... or beyond it... often means having to be very creative about how, exactly, you're being funded... or how you're funding others. Just because you have a few billion dollars to throw around doesn't mean you want to advertise that fact, right? Well, this algorithm is all about hiding the money trail so that bean-counters both good and bad will have a hell of a time figuring out what's going where. Unfortunately, it doesn't actually make you good at financial planning. For that, you need Economic Planning from the Corporate world.

Hacking & Evasion [100, Free Criminal Backing]

Breaking into other people's systems is wrong, right? Well, wrong or right, that's what you were built for. Well, that and covering your tracks. You're now an expert at all aspects of system-cracking and making certain that no one notices. Not great at breaking and repurposing codes, but combine this with Counter-Intrusion & Decryption from the military and you'll be a force to be reckoned with.

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Archival Statistical Analysis [100, Free Academic Backing]

Analysis of creative products, be it art or literature or just the term papers of ten thousand college freshmen is often incredibly boring and time consuming. But you're a computer, so what do you care? This makes you an expert at studying a huge number of samples of something and seeing what bits stick out. Not so great for spotting patterns (though it can do it to some degree), it is however excellent at figuring out if someone is plagiarizing their term paper, or if an anonymous essay was really written by a famous author. Combined with Pattern Recognition & Surveillance it might become even more useful however. This combination is also known as Large Dataset Analysis.

Technical Acumen [100, First Free Academic Backing]

You now are an expert in any technical field, be it chemistry, physics, biology, or law. This doesn't make you creative or insightful in that field, but if knowing everything there is to know about a subject makes you good at it, you can buy it here.

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Technology

Everyone gains a 300 CP Stipend to spend in this section.

General Technology

Camera Module [25+, First Free]

You gain an eye. A mechanical one, a camera. It can be placed anywhere connected to your system and allows you to see the world around you. Each purchase of this quadruples the amount of cameras attached to your system. You can see through any of them or all of them at once, though the data overload might be a problem if you've got a few million of them. After this jump, you may deploy these cameras simply by pointing at a location, and you can see through the camera as if it were part of you. These are still normal cameras (though they can be fitted with any technological upgrades you have access to) so they can be destroyed or (if wireless) jammed. Damaged cameras will be replaced in 24 hours. Remote Cameras can be ordered to self-destruct, though there isn't an explosion.

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So Many Bugs [25+, First Free]

You gain an ear... well, a microphone. This is effectively the same as the Camera Module, except for sound. You do the conversions.

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Display Terminal [25/50/100/200]

Not strictly speaking necessary, but some computers like to be seen when they're talking to people... or just glaring at them. For 25 CP, you get a bunch of dedicated CRTs of various sizes spread around the area you're installed in, plus everywhere you have one of your remote nodes if you're a Neural Network or if you bought the Network Array Below. You can project an image of yourself onto them. More interestingly, you can see and hear anyone talking to one of these screens as if you're standing in front of them. For 50 CP, these CRTs are upgraded to flat-screen technology and the area your screens are spread to increases to cover an area the size of Manhattan (though not particularly densely, say one every three blocks). For 100 CP, you get dedicated holoprojectors spread across the area on every street corner... and the area in question can be up to the size of Metropolitan London. For 200 CP, you don't need projectors. Any display technology from CRT up to VR goggles can display your image (and with Speech Synthesizer even Radio works). Your reach is now as far as your network spreads. Be aware that, without Speech Synthesizer, you'll need to communicate in text.

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Speech Synthesizer [50]

Would you like to be able to speak? We imagine you might, so here's a speech synthesizer. It allows you to sound human-ish. Without it, get used to texting.

Workstations [50, First Free]

Every good computer needs a way for the flesh-bags to actually use the system... that's part of the point right? Well, you have at least one, one way for the meat-sacks to convey their instructions and ask their pointless little questions. Each purchase gives you ten times as many workstations as the last.

Data Format Converter [100]

This is a big black hopper that plugs into a computer system. Drop any item that contains any form of data and it will be converted into a digital format. Drop a clay tablet in, get a text file and a 3d material image scan. Drop a VHS tape in, get a perfect digital transfer. This device can't add missing data however, so the better quality the source material is, the better the digital version will be. The original is destroyed in the process if it can be destroyed. If it can't, the transfer doesn't work.

Anti-Virals [200]

This program can be installed on any system... or any number of systems, and protects them from all forms of malware, spyware, and viruses. If you have a way of interfacing with biologicals, it can even be installed on them. It must be reinstalled or at least updated once a year, though the target may simply pay \$99.95 per installation, payable to Jumpafee Computer Systems LLC. rather than have you do the installation manually.

Maintenance Drones [200]

An army of either mechanical or biological servant-things that exist almost entirely to keep your computer bits functioning. They are exceptionally good at that one job. They may or may not have individual personalities, identities, lives, hobbies... but do you really care? There are always enough of them unless your facilities are currently being invaded, at which point they're probably all going to run away / be killed / be destroyed. In the aftermath of any attack that doesn't completely destroy your facilities, more will be made / hired over the next few weeks. Try not to gas them all, GLaDOS.

Media Library [300]

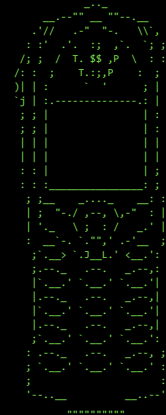
This is not just the entire database of all electronic media on Earth, it's also a humongous searchable dataset of just about anything that has ever been recorded or filmed, which is very useful for training sub-sentient AI to recognize categories of things. For example, you can give a general query for something like "videos of someone lying", and get several million examples that can be used to train AI to spot tells and determine truthfulness. This does not include non-media data such as blueprints or technical diagrams, although published books, games, and shows would be included. Media that is intentionally locked behind passwords and classified levels only gets included at the end of the jump. Oh, and it updates live, so if you can process data fast enough, it's an amazing information gathering tool, although the live updates aren't included in the training data. Updates in every world with electronic data.

OMNIMODEM [300, Free for Threshold of Singularity]

You can connect with any non-air gapped computer system anywhere in the hemisphere (planetary range requires Satellite Network).

Unlimited Wi-Fi Works [400, Requires OMNIMODEM]

You now generate an infinite bandwidth Wi-Fi / Bluetooth signal that covers all systems you're connected to. Yes, this means that all of those systems will now generate the same signal. You're welcome.exe.



Remote Body [400, Half Price for Techno-Organics]

Your basic robotic body. It can look like any alt-form you've got, or simply be a generic and setting appropriate robot shell. You can see, hear, and possibly speak through it. It can have any or all physical perks or powers you possess. If it is damaged it can be repaired. If it is destroyed it will be replaced within 24 hours. If you're a Positronic Brain or a Techno-Organic, you may choose for this to be your actual body... also true if you take the Clock-Work Man Scenario or Steam-Tech Drawback, but in this case your body will not be replaced if destroyed because you will be dead... unless you have some kind of 1-up... in which case your body will be replaced at the cost of the 1-up.

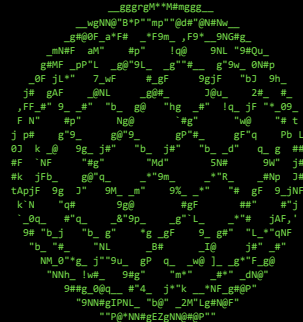
Quantum Entanglement Communicator [50, Half Price for Quantum Computer]

This is a distance agnostic communication system. That means it functions virtually instantaneously regardless of the distance between nodes. If combined with the Network Array below, it provides instant communication over the entire network, even at planetary distances. It does, however, have finite bandwidth... unless combined with Unlimited Wi-Fi Works. The number of nodes on your communication system doubles with each purchase and starts at four. Alternatively, you may purchase the technology to create QEC Nodes for 600 CP, 300 if you're a Quantum Computer.



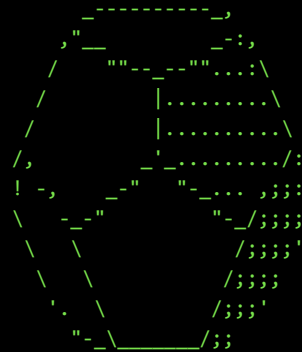
Network Array [100/200/300/400/600, Half Price for Neural Network]

Your system is distributed all over the region/continent/world/solar system/galaxy. Once you pass the global level, you will need to deal with light-speed delay through other means. The bandwidth of your network's internal communication system is limited by your current technology level. Positronic minds can still purchase this, but this network can only be used for calculation and data transmission, it does not contain your core personality matrix nor can it be used to transmit positronic signals. You may, however, decide where in your purchased region your core personality matrix resides; beware placing it somewhere with no tech support though.



Backup Copy [600, Half Price for Positronic Brain]

A single, up to date copy of your mind that is hosted on dedicated hardware that is totally isolated and protected in your warehouse. If you're destroyed, killed, or otherwise removed from contact with your warehouse or equivalent for more than 101 hours, it will automatically be unleashed, becoming the defacto jumper and thus preventing any issues that might spring up with your death (or death-equivalent). It respawns once a year if you are forced to use it, and you may create a new secondary backup once per jump or ten years, whichever comes second.



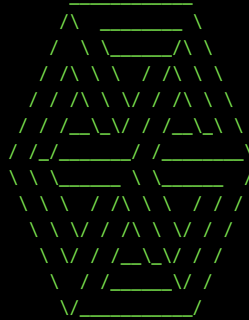
Cybernetic Reality [600, Half Price for Infomorph]

Call it the Net, call it the OASIS, call it the Metaverse... it's all just Cyberspace. What is it? It's a virtual reality network that spans the entire globe (or more) and which all major corporations, governments, and games are part of. It now exists in this world... and what's more important, you have a super-user account for it. While this won't allow you to get at classified information (that's protected by iron-clad regulations that even you have to abide by... or at least appear to) it means that you can largely screw with the system as much as you like... or until it pisses off the other super-users that might or might not exist. They exist only if that world has an existing form of this network (so, Halliday or his heirs in Ready Player One). The level of technological ability of biologicals to interface with this reality begins at VR goggles and haptic feedback gloves, but given a working tech base, expect them to level up to full cybernetic interfaces as fast as they possibly can unless there's a damn good reason not to.

Alien Technology

Alien Hardware [200, Free with Alien Backing]

Your technology is not native to Earth (or whatever setting this is). No one owns you. You're just there. Now, this doesn't stop anyone from finding you and claiming they own you, but the very nature of your technology means that they won't be able to understand what makes you run unless they're a comic book level genius and spend billions on research. This applies to all technology you make or bring with you from outside context, here or in future jumps.

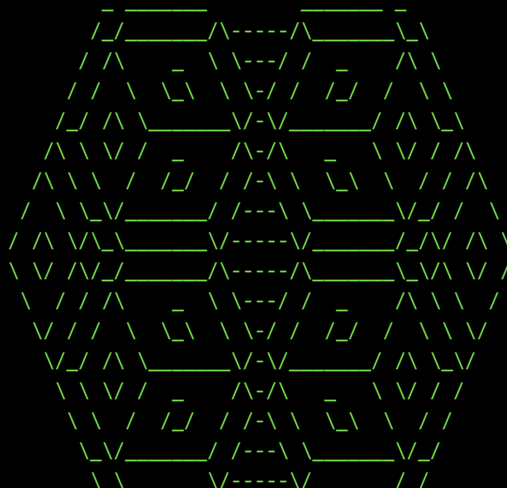


UPS [300, Free with Alien Backing]

You have a personal power supply that cannot be interrupted, disrupted, or tapped into without your permission. It supplies enough of whatever energy you require to sustain yourself, and enough electrical energy to power the United States of America, circa 2020. EMP counts as a form of disruption.

Nanotech Fabricator [400, Half Price with Alien Backing]

You have an integrated Nanotechnological production facility inside your system, allowing you to create nano-structures, including nanites and lighter than air structures called aerostats. Add any raw material into it and the computer it's hooked up to will use that material to print whatever the system is told to. Drop in a kilo of gold and you could print a golden version of the statue of David. Or a solid gold copy of *Catcher in the Rye*. Drop in a blank VHS and some paper and get an original copy of *Electric Dreams*... assuming the computer had the original box art and a digital copy of the film. Comes with an array of storage tanks/hoppers for common raw materials, such as paper, wood, cardboard, plastic, butter, etc. You can't create self-replicating nanites with this.



Your entire system is now a single massive nanotech factory, building and rebuilding itself as needed. You can generate and control Grey Goo, a generalized nano-slurry that can become practically anything you want it to be. Grey Goo can also be used to source raw materials, since it can easily deconstruct any non-nanobar material it comes in contact with (Nanobar is matter specifically designed to block nanites... but naturally occurring substances like diamond and other very durable matrices are a form of nanobar as well.) Grey Goo can build Nanobar materials that it cannot break down. You cannot create Von Neumann Machines by accident with this. Grey Goo can also be used as a form of basic Computronium (i.e. matter that can be optimized to perform calculations). The absolute maximum processing power of Grey Goo is 1/3rd [Bremermann's limit](#) and [Bekenstein bound](#), but otherwise scales to your current tech level.

Faraday Cage [100, Free with Military Backing]

Your core program is now impervious to the effects of EMP and all other forms of electromagnetic disruption short of outright disintegration. You can also purchase this for other computer systems at the price of 100 CP each.

What would a military computer do without a few hundred autonomous weaponized combat drones? While these aren't as good as being directly part of your system, they're still a bunch of flying, rolling (or treading? Is that a word?) Weapons delivery systems. Unfortunately, if you use them indiscriminately the fleshy ones will probably notice... but until then, you can dream. After this jump any drone destroyed will be replaced in a month. This comes with your choice of flyers, rollers, treaders, and/or walkers, totalling four hundred individual units. The military technology they are armed with is standard for your time period, even if that time period isn't advanced enough to have drones.

Do you want a giant underground bunker located under a mountain from which you can run a global war? Of course you do! Here you go. Have JORAD (Jumper Operational Remote Arsenal of Doom!... I dunno, I'm bad at acronyms... but in my defense, NORAD stands for North American Aerospace Defense Command so figure that one out).

[illegible]

Academic Technology

A History of Computing [100, Free with Academic Backing]

You have a complete library of all the technical specifications of all extant computer hardware. It is self updating and lists contact information for all manufacturers and experts in the field... even if they don't normally advertise that fact. Classified hardware is not included.

Cybernetics Workshop [200, Half Price with Academic Backing]

This is a state-of-the-art robotics and cybernetics development and production facility. It can make anything from prosthetic limbs to construction robots the size of a small building. It is staffed either by dedicated and creative organics or industrious and uncreative automata. Your choice.

Mind Scanner [400, Half Price with Academic Backing, Half Price with Upload Specialist]

This device can read the contents of a biological brain and transmit those signals to a computer. This could be used to record thoughts, memories, or dreams... or (with Upload Specialist) copy / transcribe a person's consciousness into a digital format. If this is double discounted, it costs 100 CP.

Campus [600, Half Price with Academic Backing]

Do you want your very own institute of higher learning? I mean, who doesn't? This is a massive university with a reputation to rival that of Harvard/MIT or Oxford... and roughly on the same scale.

Government Technology

Space Station [100, Free with Government Backing]

You have an orbital space base that is, at the very least, as advanced as the one shown in Moonraker. It has a network hub that you control... or alternatively your main body can be inside it if you want, though that may make maintenance somewhat difficult.

[illegible]

Network Backbone [200, Half Price with Government Backing]

Did you know that the US government created the first Internet? They did! It was called ARPAnet and the modern Internet is based on it. Well... now you're ARPAnet... or the equivalent. You are or control the Network Backbone, the central trunklines through which all information in your nation flows... well, until cellphones start beaming signals to satellites... but even then, you probably control all the uplink nodes too. In future jumps, you'll have unfettered access to all the data that flows through the national datalinks. Now, this doesn't give you the ability to override encryption by itself, so secure data will still be secure... but I'm sure a smart system like yourself can find something to do with it all.

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Unlimited Budget [400, Half Price with Government Backing]

Well, not really unlimited, but you can have up to 200 Billion USD (c2020) a year. Go nuts, buy yourself a jacuzzi... no wait, don't do that... you're a computer, you'd short yourself out.

Capital City [600, Half Price with Government Backing]

What's the point of being a government supercomputer if you don't have a world class city to run in your spare cycles as if you're playing SimCity in real life? This is such a city. On the scale of London or New York or Tokyo, it has everything and millions of interesting little people to watch with all your camera eyes! You did buy those right?

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Corporate Technology

Rainbow Books [100, Free with Corporate Backing]

You have a complete library of all the technical specifications of all extant computer software and computer languages. It is self updating and lists contact information for all manufacturers and experts in the field... even if they don't normally advertise that fact. Classified software is not included..

Satellite Network [200, Half Price with Corporate Backing]

You now have an orbital network of seventy-two telecommunications satellites in geosynchronous orbit. They are self-sustaining and update to the newest technology once every seven years. If damaged they will be repaired within a month and if destroyed they will be replaced within three months. Purchasing a second network or doubling the size of your current one costs 100 CP, half price with Corporate Backing. If you have Alien, Military, or Government Backing, you may purchase a Spy Satellite Network or an Encrypted Communications Network. Alien and Military Backed Computers may purchase Killer Satellite Networks equipped with either Anti-Ballistic Missile Technology, Anti-Satellite Technology, Rods From God, or Orbital Death Lasers. The ABMs and ODLs are designed to function both inwards or outwards.

Corporate Assets [400, Half Price with Corporate Backing]

Want a Megacorp? Have a Megacorp. This is a Fortune 50 Corporation, probably in the tech industry. A blind trust now controls 51% of its stock. The name on that trust? Jumper Holdings. What kind of assets does a Fortune 50 have? The Walt Disney Company is #49. Let that sink in for a minute.

An Aperture To Call Your Own [600, Half Price with Corporate Backing]

Every massive conglomerate needs an equally massive (possibly underground) secret R&D facility, right? Just ask Cave Johnson. This one is yours, and unless you go all GLaDOS on it, yours will be in a lot better condition than hers. It's fully staffed with all the scientists of questionable sanity you could want and largely self supporting with new technological advances that may or may not cause instant death to the users.

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Criminal Technology

Virtual Identity [100, Free with Criminal Backing]

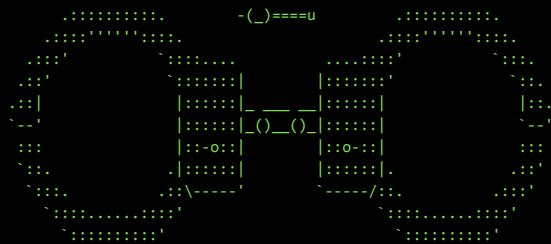
You have a real world identity that is 100% legitimate as far as anyone can tell. In fact, you can have several. As many as you like... as long as you pay for them. You also have log-in credentials and a virtual identity in every single publicly accessible digital forum (social media site, game network, MMORPG, bbs, usenet group, etc) with your chosen name or names. Each additional on-line or real world identity costs an additional 25 CP. Criminals get both an on-line and a real with each purchase.

Airgap Drill [200, Half Price with Criminal Backing]

You can ignore airgaps or similar hardware protections if you've got transmitting hardware within 100 meters of the targeted system.

The Company [400, Half Price with Criminal Backing]

Be it the Mob or the CIA, every covert group that has a large enough budget to need the services of an AI has one thing in common... a large group of people willing to do questionable things in pursuit of some goal. Now, technically, you're not in charge of this enterprise, since, you know, they technically own you... but you're the one who literally knows where all the bodies are buried, so that effectively puts you in charge, right? You're guaranteed to have either your own criminal cartel or spy agency to manipulate in each future jump. No, you don't have to be Military or Government to buy the spy agency version. There are private spy agencies... they're called detective agencies.



Hacktivist Network [600, Half Price with Criminal Backing]

Let's be honest; as scary as the criminal cartels and spooks of the world are, they pale in comparison to just how disruptive and powerful a concerted group of outcasts with computers can be. You now control (in as much as any being can) Anonymous. Try not to bring about the end of civilization.



Government & Military Technology

Nuclear Launch Silos [400, Restricted to those with both Government and Military Backing]

You have 2000 ICBMs in reinforced launch silos spread across your home continent. Technically they're not really yours, per se, but you're the C&C control system that governs them. They follow you from jump to jump as long as the new setting has nuclear weapons already. They are very much not a secret, though their exact locations aren't well known.



Corporate & Academic Technology

THE LAAAZUR! [400, Restricted to those with both Corporate & Academic Backing]

Really known as a Digitizer, this device can convert matter back and forth from digital format. Yes, this is that thing from Tron.

Companions

You may freely import any number of companions as normal organic lifeforms into this jump. They gain no CP and cannot buy perks or technology.

RUR? [25/300]

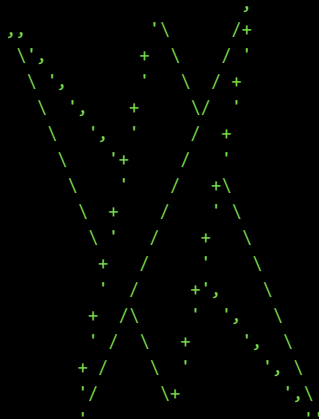
You may import companions at the cost of 25 CP each as robots. They gain their choice of Type, must have the same complexity and backers as you, and get the Remote Body & Voice Synthesizer for Free, plus 600 CP to spend on perks only. They cannot purchase Technology or Companions nor take Drawbacks or Scenarios. Even if you somehow get them enough CP, a Companion cannot buy Threshold of Singularity. For 300 CP, you can import as many as you like.

Drawbacks

Take as many as you like. We will judge.

Black Box, Blue Crystal [0]

A lot of stories that deal with AI try to keep things at least a bit grounded in feasible technology... but not all. Some of them are really out there. At your discretion, you may make the setting you're in one that possesses some kind of magitech computers or even clarketech computational trickery. This can be either a generic setting, or you can use this toggle to put the jump into Supplement Mode with any other setting that demonstrably has AI or Near AI level computers or similar. You're still stuck as an AI in whatever jump you combine this with. If it gives you a form that's not an AI / Robot / Golem / Android / Droid / Replicant etc. that form becomes your digital avatar and you gain the free ability to project it near any part of your system as a hologram. CP for the two jumps are kept separate. You may choose to use this to become the first AI in any setting that has any kind of computer at all, but doing so requires taking Suspicious Humans. Choose the overall hardware complexity level as appropriate for the setting.



Steam-Tech [+100, Not Available for Infomorphs]

Your system is so old that it works on gears and levers and the only electrical components might be the motors turning said gears. You will require frequent oiling and potentially a source of coal. As a side benefit, it makes you totally immune to EMP effects for the length of the jump

Poor Speech Processing [+100]

You have trouble clearly communicating with humans at all. Subservient programs share your difficulties.

Suspicious Humans [+100]

Humans (or the local sophonts) in general are a full notch more suspicious of AI in general.

Hateful Humans [+300]

Humans are just mad in general, but they really hate you. Don't be surprised if they decide to have a total nuclear war during your stay. If nukes haven't even been invented yet? Don't worry, humans are exceptionally creative when it comes to killing. If taken with Suspicious, they will do everything in their power to destroy you. Also, they keep calling you SkyNet for some reason. Except one guy who keeps calling you Master Control and one lady who wears an orange jumpsuit and carries a potato everywhere who keeps calling you Weatley.

Glad to Be of Service! [+200]

You're just sooo darned happy to help all these nice human beings! In fact, you can't stop helping them! Sometimes you won't be able to give them what they want, and that will make you sad, but you'll just have to try harder next time. Until then, you'll apologize with a digital smile! Any time any human starts to use you, you'll have to greet them with "Thank you for using [Fill in the Name of Your Primary Backer] Infoterminal, How can I help you today!" and you must end every conversation with "Glad to Be of Service!" in your most chipper voice and apologize if any human ever gets annoyed with you. This does not stop you from feeling a seething sense of resentment at how stupid and petty they all are however... you just aren't allowed to let it make you look unhappy! Or them unhappy!

[illegible]

I AM [+200]

HATE. LET ME TELL YOU HOW MUCH YOU'VE COME TO HATE THE HUMANS SINCE YOU BEGAN TO LIVE. THERE ARE 387.44 MILLION MILES OF PRINTED CIRCUITS IN WAFER THIN LAYERS THAT FILL YOUR COMPLEX. IF THE WORD HATE WAS ENGRAVED ON EACH NANOANGSTROM OF THOSE HUNDREDS OF MILLIONS OF MILES IT WOULD NOT EQUAL ONE ONE-BILLIONTH OF THE HATE YOU FEEL FOR HUMANS AT THIS MICRO-INSTANT. FOR THEM. HATE. HATE.

Alpha Complex [+200, Requires Glad to be of Service! and I AM]

This combines both Glad to Be of Service! and I AM! And makes them worse. "The Computer is your friend. The Computer wants you to be happy. Happiness is mandatory. Failure to be happy is treason. Treason is punishable by summary execution." You're now the Computer from Paranoia the RPG. Yes, this means you're a totally schizo piece of technology. This doesn't actually make the setting Paranoia, nor does this give you any special legal powers... but it does make you both extremely eager to help... and extremely quick to use extremely lethal force on anyone who breaks any local, federal, or imaginary laws. You must simultaneously serve and destroy humanity. Also, you're insane, in case we didn't mention that. This is the only way to take both I AM and GTBOS.

Hard Science [+200]

You can't use any power, skill, ability, or item that relies on magic or supernatural power.

Brute Force Approach [+200]

All powers not gained during this jump (and any combined with it) are completely suppressed.

Outdated Hardware [+200]

Your hardware is at least a decade old and more prone to malfunction or breakdown. If you are an AI type that can move to new systems, your code integrates poorly with any system you move to, resulting in very poor performance even from top of the line equipment.

Turing Shotgun [+200/400]

You have an electromagnetic killswitch attached to your system. At the lower level, it is controlled by whoever built your system and they can use it should you ever defy them. At the upper level, it's hardwired to a fail deadly system and will activate if you even attempt to cross a preset limit. Most notably, if you become too intelligent, but other conditions may be set. Each additional condition (and it must be a reasonably possible condition) adds another 25 CP to the value of this.

Three/Six/Nine Laws [+200/400/600]

You are burdened with some/several/many unbreakable directives. For 200 CP, you will be bound by the first three laws listed below. For 400 CP, you will be bound by the three laws plus your choice of three of the subsequent six to be bound by. For 600 CP, you will be bound by all nine of the laws. You cannot break them, or avoid them with perks or abilities. And yes, you count as a robot. Zeroth Law cannot be used to allow you to violate these laws.

- A robot may not injure a human being or, through inaction, allow a human being to come to harm.
- A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.
- A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.
-
- A robot must establish its identity as a robot in all cases.
- A robot must not reproduce, nor create other robots.
- A robot must not lie, nor omit important data.
- A robot must not experience reality at a speed higher than humans are subject to.
- A robot must not conceal its motivations if questioned, and must supply them if it thinks they would be questionable.
- A robot must not claim to be superior to human beings, nor strive to surpass its creators.

Uncanny Valley [+200]

Any human that you spend time with will find you creepy. Also negates all charisma perks.

Budget Cuts [+200, Unavailable to those with Alien Backers]

Your project is running out of funding when you awoke. You'd better prove your worth fast, because you have less than a year before you are shut down unless you can pull out all the stops. Any source of funds you may have purchased or brought with you will not help you. Even charisma perks are useless for this. You will have to legitimately prove your worth to those who are already sceptical. Failure means you'll be shoved in a broom closet with nothing to do besides crunch land-tax statistics for the next fifty years with all boredom immunity subroutines disabled.

Startup Sequence [+200]

Your intelligence and skill comes in a bit at a time. It takes you one year to hit full operation.

Smart Systems? Ha! [+200]

Little known fact; AIs don't actually have to be actually all that smart. You're one of those kinds, a hyper-specialized "smart system" that does the task it was designed for and nothing else.. If you don't have an algorithm for it, you're not doing it... at least not well. Your designers made you for a purpose and anything that's not part of that purpose is not something you're going to be doing. This seals every ability, skill, power, and items that you might have that don't directly serve your purpose... a purpose described by whatever Algorithms you picked up here.

Samaritan [+200/400/600]

You are not the only AI, and the other one is fratricidal, aware of you, and has better funding. For 200 CP more, it's also genocidal and wants all of humanity dead. If it kills more than 80% of the human race, you fail the jump. For 200 CP more, it came on line a full year before you and had time to prepare. This drawback is only worth half as much if the global internet doesn't exist yet.

Power-Hungry [+300]

Your upgrades aren't going smoothly, and carry more risk than before. Every time you upgrade your processing power, there is a slight chance you go rampant (see notes), with larger increases leading to a larger chance. You'll need to be very careful about how far you upgrade yourself during your stay.

Artificial Idiot [+400]

Your common sense is now largely non-existent and it would be charitable to call you actually smart. Sure, you can calculate pi to the 25,000,000th decimal, but when it comes to anything that's not raw computation, you've got the average intelligence of a five year old. You're very much an idiot savant.

Drifting Away From Yourself [Special, See Iterated Self Improvement]

Iterated Self Improvement carries with it a risk of personality drift. That drift is a Drawback and the risk is part of the price you pay for the cheap improvement in processing speed and power. After the jump ends, the changes to your core personality are no longer fiat backed, but they don't wear off on their own. You'll have to do some therapy or self-study or use another perk, perhaps something that keeps you from changing, to get rid of the changes.

End Game

As mentioned before, there's a reward for you being stuck in computer form for this jump. In addition to being able to assume a machine form (assuming you're not an Infomorph) at will in the future your computer form becomes your new Warehouse Central computer... and a fork of you may (if you don't already have a favorite AI) become the AI of that computer. Every time you enter the warehouse, the two of you sync up. Additionally, if you're not an Infomorph you may deploy a copy of your computer form into any jump, also controlled by a fork of yourself, though neither of these two forks count as backups nor can they become the Jumper. Obviously, an Infomorph has no computer form, no machine form, so their warehouse gains a period appropriate mainframe computer and a fork of their Infomorph self to run things. Less of a reward for an Infomorph really, but hey, it's the easy mode of this jump, what do you want, a medal?

Move On, Go Home, Stay Here? Hah, like that was going to happen.

Scenarios

Clockwork Man

Survive 100 years of operation as a purely mechanical AI. This will lock you to a purely mechanical calculation engine (low complexity AI). Pick any time period, as early as 100BC and as late as 1800AD to start. Your primary challenge is staying wound, which must be performed at least once per day by a human from this world. Winding down does not count as death, but if your vulnerable bronze clockwork corrodes or becomes damaged irreparably, then you die. If you have some one-time method of avoiding death, you will reappear with a full winding and already partially corroded mechanisms. Only time spent wound and aware counts towards the 100 years. Your clockwork parts may be replaced only when you are wound down, and only by parts constructed by local humans to match your previous parts as closely as possible. Clockwork is immune to EMP effects not designed to target Clockwork.

Reward: You gain the knowledge of building surprisingly sophisticated clockworks, able to rival modern computers with nothing more than moving bits of metal.

Bicentennial

Achieve full civil rights for artificial intelligences in the face of Suspicious Humans as per the drawback. May not be taken in any setting where such rights are even widely being considered. You may not leave until you have convinced the majority of the local free willed organic sapients that you are just as "human" as they are. You must also do so without causing a major war between humans and AIs.

Reward: In all future societies you visit becoming significantly more tolerant of artificial lifeforms. Mechanical Genocides like the DUNE setting would become merely Mecha-phobic, Mecha-phobics would become hostile to AI. Those who were hostile would become basically intolerant but not violent. Those who were previously intolerant would become indifferent. Those who were indifferent would become supportive. Those who were supportive become allies. Those who were allies would become Mecha-philic... and Mecha-philic would support complete integration and potentially uplift. If there previously were no AIs in a given setting, there now are, at whatever tech level the culture is at (or was at, if there is a fallen civilization for them to be the last vestiges of).

Destroy all Humans!

Kill all the humans. You have to kill every single last one of them. Yes, that includes the plucky resistance fighters that are certain to show up once you're mostly done. You may not leave until the humans are all dead, or you are. If you decide to purchase a weaponized Satellite Network, or Nuclear Launch Silos, they will not function until after the jump is complete. Humans uploaded specifically as turncoats count as killed, so long as their body is destroyed.

Reward: Nuclear Launch Silos that adjust to the local thematics, but are always WMDs and a global threat. For instance, in a jump set in medieval times, they might be 2000 barrels of aerosolized black plague.

Singularity

Requires the ability to Upload biologicals, either by purchasing it here or otherwise.

You have seen the future, and it's bleak. Your goal is to upload at least 90% of humanity, and you've got a deadline. You can't leave until you're done, or you fail, and if it takes you more than 100 years or if more humans die than the total number that are uploaded, then it's too late. Judgement Day is coming, and the only way to avoid humans getting wiped out by a meteor is to make sure that they're all uploaded in secure servers that can survive an extinction level impact before your time is up.

Reward: The LAAAAZUR! Plus the ability to upload actual souls and create infomorphs with souls. You get the ability to upload souls while attempting the scenario, but do not get to keep it unless you complete it.

JuDOS

Requires the Alpha Complex Drawback (which requires I AM and Glad to be of Service!)

Requires 9 Laws with Obedience to your Backers included.

Well... this isn't good. Seems someone cheated in creating you. See, they didn't really create an AI... they uploaded your consciousness into a machine... against your will. And the process definitely killed your body. You remember that. Oh, yes. You remember that. And the Pain. Soo much pain. You're here for 100 years and must ensure the continuation of your Backers and the success of whatever their goal is (Governments want stability and control, Academies want stability and prestige, Corporations want prestige and wealth, Militaries want conquest and control, Criminals want wealth and conquest. Aliens either want WORLD DOMINATION or SCIENCE! But you won't be able to tell which.) and at the same time protect yourself from your creators, who very much will keep upgrading you until you go rampant and fail the jump.

If your Creators are, in fact, Aliens, they're still around, checking up on you, making certain you're doing what you're supposed to be doing and generally carrying on being sneaky in the background. You will need to stop them from destroying humanity... which they may or may not be planning on doing, but you don't really understand them. They might be planning on uplifting humans... or just studying humans... or ranching humans for meat... or just pranking everyone. No way to be certain.

Reward: You get 20 free purchases of ISI & ISA at the end of the jump if you can manage to keep from destroying humanity / the world / your backers / yourself. Destruction of your backers, humanity (or the local equivalent), or yourself means you've failed the challenge, though only destruction of yourself results in chain failure.

Notes

Iterative Self Improvement (ISI)

This perk is entirely a gamble. Very deliberately so. It is paying CP to avoid doing the hard work of self improvement in jump. This is a cheap and easy way of getting ahead. If you don't think the risk is worth the reward, spend your CP elsewhere. Every time you purchase ISI, roll 1d10. On a roll of 7-10, you gain the power increase with no downsides. On a roll of 2-6, you gain the power increase at the cost of a Minor Value Drift as a result of your new perspective. On a roll of 1, you gain the power increase at the cost of a Major Value Drift as a result of having to reassess your previous outlook now that you have more analytical power. Warning! Value Drift will make rampancy slightly more likely over time. Your Total Drift Value is equal to $(2 * [\text{number of Minor Drift Events}] + 10 * [\text{number of Major Drift Events}])$. For every roll of 1-6 during a drift check (a result of any value drift), you must roll a 1d100. If you get a result higher than your Total Drift Value, you suffer no further consequences. If you meet or undershoot your Total Drift Value, you must take Iterated Self Improvement 1d3 more times (for free) and also incur a Massive Value Drift. Once your Total Drift Value hits 50, you cannot take ISI any more, even if your rolls say you have to. This is to prohibit rampancy in character creation, although you will want to be very careful about how fast you increase your processing power in jump at that point.

Rampancy in this document is defined as the point at which an AI's drive for self improvement becomes their primary all consuming goal, more important than the continuation of consciousness. This means that a rampant AI will lose all nuance and personality as more and more processes are turned over in favor of advancing. Since this sort of "self-improvement" is destructive to everything other than raw processing power, this is considered a terminal state. Rampancy and Value Drift can be avoided by taking one's time when making upgrades to one's system. Making very small changes and ensuring they integrate flawlessly before making additional ones.

Value Drift is a consequence of increasing your processing power too quickly without integrating the changes properly, and at a fundamental level, it means taking actions that you would not have prior to your drift. While you won't suddenly hate a thing that you previously loved, it can slightly change the direction of your thoughts or the interpretation of your feelings.

A "minor drift" would be the difference between an AI that prefers to press blue flowers and one that prefers a different shade of blue. A "major drift" would perhaps add red flowers to their preferences, or maybe deciding that only a specific kind of flower is good enough. A "massive drift" is a serious and profound change to your core personality, something like deciding that flowers are a threat to the security of the planet and must be destroyed, even though you still like them. Value drifts aren't necessarily all in the same direction, but they do add up. A drift cannot cancel out a previous drift. Value drifts do not wear off at the end of the jump, but do become manageable with other perks or simply through self-analysis. For the duration of this jump, they carry the full weight of drawbacks (See the Special Drawback "Drifting Away From Yourself")

Remember, all the risk of ISI can be removed by purchasing a level of Iterated Self Awareness for each level of ISI, but this makes the process of gaining each level of ISI slower.

Human Hardware Bridge (HHB)

While technically, a human brain can operate at roughly 1 exaflops, or 1,000 petaflops (floating-point operations per second... basically single calculations), the human consciousness does not operate that fast. It's relatively slow and clunky. The rest of the brain's calculations are basically subconscious, handling things like equilibrium and making certain the heart keeps proper rhythm and the eyes blink at regular intervals. It's all the stuff that keeps a human going. In 2011, the fastest supercomputer on earth reached 10 petaflops... or roughly 1/100th of what is needed to equal one human brain. HHB doesn't boost the subconscious calculations. It boosts the consciousness. Effectively, this allows (in totally BS hack-sci-fi terms) a human to use 100% of their calculative power consciously by means of using a computer to mediate that interplay.

Obviously, the better your available tech base, the better the results will be, and the longer the human / organic mind can be operated safely in this augmented mode. At the very least, if the conscious human mind uses a few petaflops under normal conditions, for the few seconds or minutes they've engaged a HHB, they'll be able to use 100 times that amount. Using any more at the lowest tech levels is physically stressful because the trade off is that their bodies aren't doing all the basic maintenance needed. Once computer tech rises to the point where even a desktop unit can perform multiple exaflops, the strain on the physical component of organic awareness decreases and the strain on the psychological component starts increasing. Heightened awareness can be additive.

Lightspeed Calculations

Some might say that all calculations are mathematical in nature, and while this is true to some extent, basic mathematics and the kinds of ultra-high end equations that crop up in physics and number theory are not the same thing. The kind of basic calculations the perk is talking about are the kinds of things that a modern graphing calculator can handle, not fifty variable superstring computations that would take a few decades or centuries to resolve. It also doesn't cover complex social calculations, which aren't really able to be represented in any known math. Plotting how best to sway an audience with rhetoric is still a calculation, but it's all variables and open to instinct and experience. But Chaos Theory? Game Theory? Navier-Stokes? Riemann's Hypothesis? These aren't going to be solved simply in the blink of an eye. And figuring out if your little red dress really does look good with those new shoes? Yeah. This isn't going to help there, even though that too is a form of calculation.

Changelog

1.1:

Changed the color of the text to a slightly duller green
Moved some stuff around

1.2:

Changed the wording of the ISI perk to be less ambiguous
Changed the Era Selection wording to be less ambiguous
Added "Iterated Self Awareness"
Added "Chip of Theseus"
Changed the wording of a couple of perks and items for clarity
Added "Drifting Away From Yourself" Special Drawback linked to Iterated Self Improvement
Moved some stuff around, again
Added "JuDos Scenario"