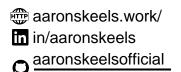
Aaron Skeels

Aerospace Engineer Software Developer





EDUCATION	HARD SKILLS	SOFT SKILLS
E.S. Aerospace Engineering Emphasis Astronautics (Summa Cum Laude - 3.82 GPA)	 Java: JDBC, JUnit, Maven, Spring Collections, Exceptions, Generics Multithreading, OOP JS: TypeScript, Node.js, React C++, Git, GitHub Actions/Pages SQL, Liquid, Linux, UE5, MatLab RaspberryPi, CI/CD, SolidWorks 	Leadership/Competency: PTK VP of IT Comp Sci Club Head CubeSTEP Thermal Lead Rocketry & Robotics Lead Emrys Space Design Thrml/Pwr Lead

WORK EXPERIENCE

Freelance Software Developer (Spigot)

- 2012 Current aaronskeels.work/spigot
- 300k+ downloads on Java-based modifications to a Minecraft server framework called Spigot.
- Open source code hosted on GitHub for collaboration with community feature/bug pull requests.
- Personal cross-disciplinary tech innovations have driven the culture and paved the way for countless "inspired" publishings (which was the goal from the beginning).

Engineering Intern (The Pilot Group)

- Trained in 3D design (topology), blueprinting, and 3d modeling/CNCing on SolidWorks.
- Trained in hand machining sheet metal and wood.
- Handed fully custom five-figure project blueprints and allowed to handcraft three of them independently for international partners. Project unified all lessons by including blueprint reading, CNC machining, hand machining, outsourcing of parts, and construction.

PROJECTS - (A fully detailed project list can be found at aaronskeels.work/projects)

- Personal Site (Node.js, React, Vite, CI/CD, GitHub Pages)
 Created a portfolio site to host documentation on past project progress, challenges, and achievements.
- Spigot Plugins (Java, Git)
 Achieved 300k downloads modding the Spigot Minecraft server framework. GitHub and Discord allow community feedback, pull requests, bug reports, etc.
- Fall Guys Clone (UE5, C++, Blender)
 Dedicated 3 days to replicating Fall Guys including modeling, rigging, animations, material textures, level design, and fundamental gameplay from scratch.
- Nail String Art (JS, Java)
 Developed software that calculates how best to thread string between a circle of nails to recreate an input image. Handles 1250x1250 compute space with 250 nails (best available online).
- CubeSTEP Report (RaspberryPi, Linux, C++)
 Sole authored Critical Thinking Report for JPL on 'The Development, Manufacturing, and Testing of the
 CubeSTEP Satellite'. Achieved contract to design, manufacture, and produce a functional cubesat for their
 current NDA payload and future payloads.
- High Speed Fluid Dynamics Simulation (MatLab, Simulink)
 Simulated supercritical airfoil performance across differing angles of attack. Self-derived formulas, proving formulas given by professor's answer key were wrong.
- Misc Other Projects: Shopify Clothing Brand, LED Protocol Sniff & Reverse Engineering, ToneJS Based Music Synthesizer, Autonomously Administrated College Discord Server, ECDH AES-256 E2E Encryption Chat, SQLite Login Service, Laser Eye Tracker, & many others in detail @ aaronskeels.work/projects.