Jeff Shelton

(478) 225-8234 | jeff@shelton.one | linkedin.com/in/jeffcshelton | github.com/jeffcshelton

EDUCATION

Georgia Institute of Technology — Atlanta, GA
Master of Science, Computer Science: Machine Learning – 4.0 GPA — *Aug. 2025 – May 2026*
Bachelor of Science, Computer Science: Systems & Architecture, Devices – 4.0 GPA — *Aug. 2022 – May 2025*

EXPERIENCE

SpaceX — May 2024 – Aug. 2024
Software Developer Intern — *Seattle, WA*
- Designed and implemented the Plug and Plaser hardware **self-verification framework** for orbit, in **C++** and **Python**.
- Wrote the interface for Starshield's Plug and Plaser module to communicate with third-party satellites, in **C++**.
- My internship work alone directly satisfied contractual customer requirements valued in excess of **$1.1 million**.

Yellow Jacket Space Program — Aug. 2022 – Feb. 2025
Director of Avionics — *Atlanta, GA*
- **Led 40+ engineers** in designing a custom, modular **avionics stack** for a collegiate space program supporting **3 vehicles**.
- Led technical developments, financial planning, recruiting, and member management for avionics and the club.
- Wrote software to track the rocket, relay data to operators, and a sequences system in **Rust**, **C**, and **C++**.

College of Computing, Georgia Tech — Aug. 2023 – May 2024
Teaching Assistant — *Atlanta, GA*
- Taught multiple lab sections of **50+ students** for Computer Organization and Programming (CS 2110).
- Achieved the **highest student-reviewed score** of all TAs for teaching ability and engagement, both semesters.
- Taught and created assignments for topics from transistors and logic gates through the **C** programming language.

Northrop Grumman — May 2023 – Jul. 2023
Software Developer Intern — *Warner Robins, GA*
- Proactively identified and **patched 4+ bugs** in the threat detection system of a U.S. military aircraft, in **Ada**.
- Developed and fixed over **50 automated tests** for the radar systems of aircraft, using **C#**.
- Successfully presented a plan to revamp the automated testing program, changing the daily duties of **8 employees**.

Silvervine Software — Jun. 2022 – Aug. 2022
Software Developer Intern — *Warner Robins, GA*
- Created a new **testing framework** for their insurance policy tracking system using **TypeScript** and **Playwright**.
- Took initiative to fix **10+** critical **SQL** injection vulnerabilities found by writing a custom **Python** script.

Physikality — Sep. 2019 – Dec. 2020
Freelancer / App Developer — *Perry, GA*
- **Developed** and **sold** *A Trip to the Dentist* to the Pediatric Dentistry of Central Georgia to help calm young patients.
- Wrote both an **iOS** app with **Swift** and an **Android** app with **Kotlin**, collectively downloaded **1500+** times.

PROJECTS

Portal Laptop | *Rust, Solid.js, TypeScript, Nix, Figma* — Jan. 2025 – Present
- Led a cross-discipline team of 6 to develop a specialized **laptop from scratch** that acts as a window into a user's desktop.
- Developed custom remote desktop protocol achieving under **20 ms latency** over an encrypted peer-to-peer tunnel.
- Conducted **178 customer interviews**, secured a waitlist of customers, and incorporated with the intent to **patent**.

Weave Programming Language | *Rust, Python, JavaScript, C, C++, Swift, etc.* — May 2025 – Present
- A **custom programming language** enabling the developer to directly import and call source code from other languages.
- Novel syntax and semantics directly inspired by **Rust**, **Swift**, **Zig**, and **C++**.

JDX | *Python, C, Rust* — Jul. 2021 – Jun. 2022
- A collection of libraries and tools to enable **smart compression** of images for training neural networks into one file.
- Increases the efficiency of storage and recall of images by minifying training sets, empirically up to **10x**.

Degrees | *Swift, SpriteKit* — Jun. 2018 – Sep. 2018
- Wrote an **iOS game** from scratch where the aim is to collect a coin by flinging an orbiting circle out from a planet circle.
- Written in **Swift** with **SpriteKit**, published on the App Store, and downloaded **1000+** times.

PUBLICATIONS

The Design of a Modular Avionics System for Spaceshot Liquid Rockets — Apr. 2025
AIAA 2025 Regional Student Conferences (to appear) — *Greensboro, NC*
- Co-authored a research paper on YJSP's modular avionics system, which supports **3** distinct propulsive vehicles.
- Presented to expert judges at the AIAA Region II Student Conference, receiving **4th** overall and **71/75** points.