Joseph Shetaye

(952) 221 7996 | hire.joseph@shetaye.me | https://www.linkedin.com/in/shetaye/ | https://github.com/shetaye

EDUCATION

Stanford University Stanford, CA
Bachelor of Science in Computer Science, GPA: 4.03/4.00 Sep 2022 – Jun 2026 (expected)
Relevant Coursework: Artificial Intelligence: Principles and Techniques, Design and Analysis of Algorithms, Operating Systems Principles, Embedded Operating Systems, Digital Systems Architecture, Advanced Systems Laboratory

TECHNICAL SKILLS

Programming Languages: Go, C, C++, Java, JavaScript, Vue, React, Python, HTML, CSS, Dart
Tooling and Platforms: IDEA, GoLand, PyCharm, Visual Studio, Git, Amazon Web Services, Google Cloud Platform, Microsoft Azure, Docker, Kubernetes, HashiCorp Terraform, GitHub Actions, OpenAPI, OpenAI APIs, Flutter, Unix, Bash, Verilog, VHDL

WORK EXPERIENCE

Stealth Defense Startup San Carlos, CA
Software and Avionics Intern Feb 2024 – June 2024

- Write guidance, navigation, and control software.
- Develop high performance computer vision pipelines.

Tibex Technology Minneapolis, MN
Full Stack Software Engineer Dec 2019 – Sep 2023

- Led the development of cloud native web applications.
- Developed an evidence discovery API integration that sends over 3,000 discoverable files from prosecutors to defense attorneys per month, significantly improving prosecutor and defense attorney productivity.
- Developed an integration with Axon body cameras that has processed over 7,000 video and photo files since implementation in December of 2022.
- Discussed project requirements with stakeholders and overcame the boundary between technical and non-technical communication.

PROJECTS

Thread Equivalence Checker (C, Armv6 assembly, Raspberry Pi)

- Wrote an optimized bare metal tool for proving the correctness of multithreaded programs

Satellite Flight Code (C, Armv7-m assembly, SAMD51)

- Developed satellite flight code from scratch (no RTOS or drivers)
- Wrote peripheral and LoRA drivers while minimizing binary size
- Implemented over-the-air updates

Omega CPU (VHDL, Xilinx Spartan FPGA)

- Built a 32-bit RISC (reduced instruction set computer) CPU roughly based on the MIPS architecture.
- Presented the CPU at the Minneapolis MakerFair

Swagger.lss (Go, LotusScript)

- Wrote a Swagger API code generator for LotusScript that reduced SDK development time estimates by an order of magnitude.

LEADERSHIP AND PROFESSIONAL DEVELOPMENT

Management Leadership for Tomorrow Washington, DC
Career Preparation Fellow Jan 2024 – Present

- Accepted into a selective 18-month professional development program for high-achieving diverse talent.
- Complete business case studies and assignments to grow leadership and technical skills.
- Attend conferences hosted by industry leaders, such as Deloitte, LinkedIn, and Target

Stanford Student Space Initiative Stanford, CA
Satellite Team member, Software Sub Team Member Sep 2023 – Present

- Collaborate with other students to build and develop reliable control software for satellite systems.
- Plan and execute rewrite of 12k+ line Python codebase in C.

ADDITIONAL SKILLS AND INTERESTS

Proficient in several forms of communication (email, Slack, pull requests, software documentation)
Interested in open source, government, and the application of software in the service of the public.