Joseph Shetaye

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EDUCATION

Stanford University <div align="right">Stanford, CA</div>

Bachelor of Science in Computer Science, GPA: 4.04/4.00 <div align="right">Sep 2022 – Jun 2026 (expected)</div>

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 <div align="right">San Carlos, CA</div>

Avionics and Software Intern <div align="right">Feb 2024 – Jun 2024</div>

- Participate in the entire software development lifecycle for counter UAS solutions.
- Own the development of production real-time (5ms) flight software.
- Implement guidance, navigation, and control software.
- Develop ultra-low latency computer vision pipelines for edge devices.

Tibex Technology <div align="right">Minneapolis, MN</div>

Full Stack Software Engineer <div align="right">Dec 2019 – Sep 2023</div>

- 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)

- Developed a verification tool to prove the correctness of multithreaded programs.
- Wrote optimized bare metal C with no OS support
- Made extensive use of ARM architecture features such as the debug unit and MMU

Satellite Flight Code (C, ARMv7-M)

- 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 <div align="right">Washington, DC</div>

Career Preparation Fellow <div align="right">Jan 2024 – Present</div>

- 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 <div align="right">Stanford, CA</div>

Satellite Team member, Software Sub Team Member <div align="right">Sep 2023 – Present</div>

- 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.