Joseph Azevedo

jazevedo620@gmail.com • US Citizen • 🕠 jazeved0 • Website: jazevedo.me

EDUCATION

JAN 2022 - | Georgia Institute of Technology, Atlanta, GA

DEC 2022 | Master of Science, Computer Science

Concentration: Computing Systems

Jun 2018 - Georgia Institute of Technology, Atlanta, GA

DEC 2021 | Bachelor of Science, Computer Science

Concentration: Networking & Graphics

SKILLS

LANGUAGES: Go, Rust, Python, Java, TypeScript, HTML/CSS, C/C++

SOFTWARE: Git, Docker, Kubernetes, gRPC, Linux, Windows, SQL (Postgres, MySQL) NoSQL (MongoDB, Elasticsearch)

CONCEPTS: Containerization, Microservices/RPC, Unit & integration testing, CI/CD, Benchmarking

COURSEWORK: Data structures, Algorithms, Databases, Networks, Operating systems I/II, Cloud computing, Distributed systems

WORK EXPERIENCE

Aug 2021 -Dec 2021

Software Engineering Intern

Datadog

• Designed a novel monitoring daemon using **eBPF** to collect **HTTPS** traffic from **Go** programs *in-memory & before encryption*

GPA: 4.0/4.0

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- Utilized Linux eBPF & C, Linux binary formats (ELF, DWARF), & Go compiler/runtime internals to create proof-of-concept
- Developed code generation tooling to automatically extract **Go** version-specific metadata from compiler artifacts, facilitating a wide range of supported **Go** compiler versions

May 2021 -

Software Engineering Intern

Aug 2021 | Strip

- · Worked with another intern to develop a Ruby client library (incl. automated tests) for an internal config distribution platform
- Developed a last-mile caching sidecar in Go (incl. automated tests) to bypass limitations of Ruby multi-threading & serve a
- Created both Kubernetes and Puppet deployment configurations to facilitate integration with existing service deployments

May 2020 -

Software Engineering Intern

Aug 2020

MathWorks

- Added new features to a Go microservice and its React/JavaScript web dashboard, including unit and integration testing
- Developed a custom Kubernetes controller in Go to work with internal orchestration service to manage dynamic deployments

Aug 2019 -

Teaching Assistant

DEC 2020

Georgia Institute of Technology | CS 2340 - Objects & Design (Object-oriented design)

- Led a team of 6 other teaching assistants to prepare and deliver 15 supplemental lectures over the course of a semester
- · Graded project milestones and held office hours for students making a group project in Java Swing or Python Flask
- Created code style autograder scripts/workflow using **Python** for student projects used by 1,300+ students over 3 semesters

LEADERSHIP

July 2019 -

President

Aug 2020

Georgia Tech Esports Club

- · Led one of the largest student organizations at Georgia Tech with over 300 active members and 20 competitive teams
- Planned and led a team of 20 organizers to host a regional collegiate LAN tournament (Gamefest) with over 400 participants

PROJECTS

Fев 2020 -

rAdvisor

DEC 2021

Open-source system resource utilization monitor for Docker & Kubernetes • • • elba-docker/radvisor

- Developed a low-overhead monitoring daemon in Rust that monitors Linux cgroups and polls Docker or Kubernetes
- · Conducted hundreds of distributed cloud experiments using Python/Bash to test the tool's overhead and consistency
- Wrote final report that details the software design, experimental procedure, and results 🗘 elba-docker/report
- Integrated with performance monitoring toolkit during the course of work as a Research Assistant at Georgia Tech