Christopher Bloodsworth

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Personal Website: https://cbloodsworth.github.io

Technical Skills and Interests

Languages: C++, Rust, Python, Java, C, JavaScript (TypeScript)
Developer Tools: Linux, Bash, AWS (S3, EKS, EC2, Lambda), Git, Vim, SonarQube, Docker, Kubernetes, Jenkins
Interests: Compilers, language design, parallel computing, API design

Education

Georgia Tech — Atlanta, GA
Online Master of Science in Computer Science (In Progress) — *August 2025 – Est. 2028*

University of Florida — Gainesville, FL
Bachelor of Science in Computer Science, Minor in Mathematics — *January 2019 – May 2024*

- GPA: 3.78
- Member of the engineering honor society Tau Beta Pi.

State College of Florida — Sarasota, FL
Associate's Degree in Liberal Arts and Sciences — *August 2018 – December 2020*

- GPA: 3.71
- Designated recipient of "Outstanding Student in Mathematics" award.

Experience

Software Engineer — July 2024 – Present
MRSL Real-Time Systems Laboratory — *Sarasota, FL*

- Contributing to the maintenance and evolution of a mature, real-time signal processing framework.
- Leading development of a Rust crate that provides a safer interface to the framework's C++/Fortran libraries.
- Designed tools to measure code coverage for the framework's domain-specific scripting language.

Software Engineering Intern — May 2023 – August 2023
MRSL Real-Time Systems Laboratory — *Sarasota, FL*

- Worked closely with performance-critical digital signal processing (DSP) applications in C++.
- Designed a concurrently-executed DSP algorithm to operate across pods in a Kubernetes cluster.
- Programmed entirely on a remote instance hosted on AWS EC2.

Peer Mentor (Teaching Assistant) — September 2023 – May 2024
CEN3031: Intro to Software Engineering — *University of Florida*

- Used Docker to containerize and deploy a full-stack React app for students to contribute to.
- Coordinated course materials, held office hours, and gave lectures on topics related to software engineering.

Technical Lead — September 2022 – Present
Open-Source Club — *University of Florida*

- Managed twice-weekly discussions and working sessions for various open-source projects.
- Led a group of students dedicated to the development and usage of APIs of various complexities.

Projects

PearTerm — Ongoing
Personal

- Created a terminal and shell in Typescript to emulate the functionality of a UNIX/sh system.
- Implemented parsing of the shell language aligned with POSIX shell standards.
- Created shell built-ins, such as `ls`, `cd` and `cat`, to interact with an in-memory filesystem.

PLC Language Compiler — April 2023
COP4020: Programming Language Concepts — *University of Florida*

- Designed and implemented a compiler for an academic language.
- Included parsing program text to an AST and Java source code generation.