Christopher Bloodsworth

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Education

University of Florida — Gainesville, FL
Bachelor of Science in Computer Science — *January 2019 – May 2024*
- Majoring in Computer Science and Engineering with a minor in Mathematics. GPA: 3.73
- Member of the engineering honor society Tau Beta Pi.

State College of Florida — Sarasota, FL
Associate's in Liberal Arts and Sciences — *August 2018 – December 2020*
- Member of Gator Engineering @ SCF, taking both UF and SCF courses before transferring to UF proper.
- Graduated Magna Cum Laude and as the designated recipient of "Outstanding Student in Mathematics."

Experience

Software Engineering Intern — May 2023 – Present
MRSL Real-Time Systems Laboratory — *Sarasota, FL*
- Working tightly with performance-critical digital signal processing (DSP) applications in C++.
- Designing a parallelized DSP algorithm to operate synchronously across pods in a Kubernetes cluster.

Technical Lead — September 2022 – Current
Open-Source Club — *University of Florida*
- Manages twice-weekly discussions and working sessions for various open-source projects.
- In Spring 2023, led OSC-API, a subgroup of Open-Source Club dedicated to the development of small-scale APIs.
- In Fall 2022, led the development for AL-Bot 2.0, a discord bot written in Typescript using the Discord.js API.

Projects

Manuela — March 2023
RoboTech 2023 — *Georgia Institute of Technology*
- AI chat buddy written in Python. Uses OpenAI's DaVinci GPT-3 model, Google Text-to-Speech and OpenCV's face detection API to detect the user's current mood and provide meaningful, human conversation.
- In a four-person hackathon group, programmed the mood-detection portion and the main driver.

Swamp Investigator — January 2023
SwampHacks IX — *University of Florida*
- Procedurally generated exploration game made in Python using the PyGame framework.
- Developed world generation using Perlin noise algorithms to create a realistic swamp to explore.

File Systems — December 2022
COP4600: Operating Systems — *University of Florida*
- Using C++ in a virtual Ubuntu environment, created a program that could read and display the contents of WAD files. Integrated this with the FUSE API (filesystem in userspace) to create a fully navigable file system.

PLC Language Compiler — April 2023
COP4020: Programming Language Concepts — *University of Florida*
- Designed and implemented a compiler for a made-up language to Java code.
- Included parsing, AST generation and type-checking.
- Written in Java and makes use of a number of popular object-oriented design patterns such as the Visitor and the Abstract Factory.

"ProtestPlots" Scrum Master & Python Developer — September 2022
CEN3031: Intro to Software Engineering — *University of Florida*
- Developed a Python script using Selenium and BeautifulSoup to gather and store data necessary to the web-app.
- Held stand-ups multiple times a week to discuss and resolve impediments that the team may face, estimated effort-hours of tasks, and facilitated sprints with Jira.

Technical Skills

Languages: C++, Java, Python, C, JavaScript (TypeScript)
Developer Tools: Linux, Bash, AWS (S3, EKS, SC2, Lambda), Git, Vim, SonarCloud, Docker, Kubernetes