

BRIAN GUNNAR MAGNUSON

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EDUCATION

Bachelor of Science in Computer Science + Minor in Digital Arts and Science

May 2025

University of Florida

Gainesville, FL

Relevant Coursework: Operating Systems, Human-Computer Interaction, Intro to Software Engineering, Programming Language Concepts (Java), Data Structures and Algorithms (C++), Computer Networking Fundamentals, Intro to Machine Learning, Enterprise Software Engineering Practices, Information and Database Systems, Project Methodologies.

GPA: 4.0/4.0

TECHNICAL SKILLS

Languages: C, C++, C#, Java, Kotlin, Python, Rust, JavaScript, TypeScript, HTML, CSS, SQL.

Frameworks & Libraries: React, Next.js, Angular, Svelte, Node.js, Matplotlib, Tensorflow, Jetpack Compose, LLVM.

Developer Tools: Git, AWS, Visual Studio Code, Visual Studio, IntelliJ IDEA, Android Studio, Unity Game Engine.

Certifications: AWS Certified Cloud Practitioner (Oct. 2025).

WORK EXPERIENCE

Teaching Assistant for Data Structures and Algorithms

Aug. 2023 - May 2025

University of Florida

Gainesville, FL

- Coordinated discussion classes for 40+ students to provide lectures on C++, data structures, and algorithms.
- Advised 60+ students during office hours to assist with conceptual and practical programming assignments.
- Crafted 10+ lessons with graphics, animations, and practice problems to aid students with course content and quizzes.

INVOLVEMENT

Software Engineer

Jun. 2024 - Apr. 2025

UF Computing Student Union, University of Florida

Gainesville, FL

- Collaborated with a team of 10 people to design and develop a website in Svelte for a club with over 2000 members.
- Implemented the events page to showcase events from over 35 computer science and engineering clubs.

Front-end Developer

Oct. 2023 - Dec. 2023

Society of Software Developers, University of Florida

Gainesville, FL

- Collaborated with a team of 5+ club members and employed Agile software development to help facilitate production.
- Designed and implemented the website's components with React and Next.js to communicate the club's purpose.
- Orchestrated and delivered an introductory React workshop to an audience of over 50 attendees

Front-end Developer

Oct. 2022 - Apr. 2023

Open Source Club, University of Florida

Gainesville, FL

- Collaborated with a team of 20 people to develop a new website for Open Source Club to attract new members.
- Designed a modern, responsive home and blog page to make the website more attractive and accessible to its users.

PROJECTS

Multi-Agent Board Game Strategy Through Simulation

Aug. 2024 - Apr. 2025

University of Florida

Gainesville, FL

- Trained a reinforcement learning agent to display strategic decision-making as part of a project sponsored by CAE.
- Modified a simulation of the board game Catan to enable swift training of AI models, resulting in a 37% win rate.
- Utilized Agile methodology to manage tasks in a team of 7 members to ensure project requirements are met.

Niter Programming Language and Compiler

Feb. 2024 - Jul. 2024

University of Florida

Gainesville, FL

- Designed a fast, statically-typed programming language with a simple, multi-stage compiler built using C++ and LLVM.
- Utilized LLVM libraries to provide powerful optimization capabilities and cross-platform compilation.
- Wrote over 200 integration test cases for each compiler stage using the Catch2 framework to verify functionality.

Student Budget Tracker

Jan. 2023 - Apr. 2023

University of Florida

Gainesville, FL

- Designed a web application using Angular to help college students monitor and manage their finances effectively.
- Coordinated with a team of 3 to create a front-end user interface and a back-end REST API.

AWARDS

Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC) 2025 Best Paper

Dec. 2025