Tyler Landtroop

Education

University of Florida

May 2025

Bachelor of Science in Computer Science; GPA: 3.85/4.0

 $Gainesville,\ Florida$

Relevant Coursework

- Data Structures
- Algorithms Analysis
- Algorithms Analysis
 Operating Systems
- Networks

- Programming Languages
- Database Management
- Computer Architecture

Experience

Software Engineer Intern

• Software Engineering

May 2024 – Aug. 2024

Intercontinental Exchange

Jacksonville, FL

- Developed full-stack features using **Java**, **Spring**, and **Typescript**, integrating test-driven development into the workflow to increase code coverage by 35%.
- Supported transition from deprecated COBOL-based MSP to user-friendly MSP DX platform, improving loan data accessibility and reducing new user onboarding time by 4 months.
- Showcased new functionality through technical presentation to cross-functional mortgage servicing teams, meeting all internship project milestones within a 3-month timeline.
- Collaborated in Agile software design meetings to analyze user needs, translating complex mortgage servicing requirements into technical specifications.

Front End Developer Intern

Jan. 2023 - May 2023

Active Learning Program @ UF

Gainesville, FL

- Led the development of a full-stack web application using **MERN** stack to streamline the senior design class group selection process, reducing administrative time by 50%.
- Built the interface and front-end components for student team formation and advisor matching, resulting in a 30% increase in satisfaction among 50 students and 10 faculty members.

Projects

Jotion | Next.js, React, Convex, Tailwind, Clerk

Nov. 2023 - Dec. 2024

- Architected and deployed a full-stack Notion clone, including real-time collaboration features.
- Implemented an intuitive, drag-and-drop interface and customizable rich-text editor with BlockNote, allowing for a 30% increase in productivity.
- Designed a nested, parent-child document structure and database system to allow for complex relationships between notes.

Terminal Portfolio | TypeScript, React, Tailwind, Next.js

Oct. 2023 – Feb. 2024

- Built a minimal personal portfolio in the style of a Unix terminal using TypeScript and Next.
- Developed a command-line interface within the browser, allowing the user to navigate using 20+ custom commands.
- Implemented tab completion, command history, and vim-style keyboard shortcuts to create an authentic terminal experience.

Compiler/Interpreter | Java, JUnit, Intellij IDEA

Aug. 2023 - Dec. 2023

- Designed and implemented a Java-based compiler/interpreter for a programming languages course.
- Implemented a lexer, parser, type checker, optimized AST, and code generation modules.
- Collaborated in creating a JUnit testing suite with over 150 test cases, achieving 97% code coverage.

Nonogram – SwampHacks IX | Python, PyGame, Replit

Jan. 2023

- Engineered and launched a functional Nonogram puzzle game clone using Python and PyGame during the 36-hour SwampHacks IX hackathon.
- Optimized game performance to achieve a consistent 60 FPS on 100% of tested devices, while keeping the codebase modular for future enhancements.

Technical Skills

Languages: Java, TypeScript, Python, C++, HTML/CSS, SQL

Developer Tools: Git, Linux, Docker, Azure DevOps, AWS Toolkit, Visual Studio Code, Intellij IDEA

Technologies/Frameworks: React, Next.js, Spring/Spring Boot, JUnit, Jest, Material-UI