Richard Trinh

Olathe, KS | (816) 288-7470 | rktrin26@colby.edu | rtrinh760.github.io

Education

Colby College – Bachelor of Arts in Computer Science — May 2026

Skills

Languages: Java, C#, Python, JavaScript, TypeScript, C, C++, SQL, VHDL
Frameworks/Software: React, Node.js, .NET Framework, Flask, Docker, Git, Postman, Azure, PostgreSQL, Oracle

Experience

Incoming Software Engineer Intern, Netsmart – Overland Park, KS — November 2023 – Present

Computer Science Teaching Assistant, Colby College – Waterville, ME — September 2023 – Present

- Held weekly office hours for Java DSA & OOP project help, improving average grades by 20%
- Conducted code reviews on 50+ student projects to debug issues and provide feedback

Full Stack Software Engineer Intern, Terracon – Olathe, KS — June 2023 – August 2023

- Developed a data automation microservice with C#, .NET, and Azure, improving data accuracy of finance analytics dashboard app by 60%
- Optimized the microservice's SQL queries to Snowflake, decreasing pipeline processing times by 55%
- Designed an interface in React to store engineering project queries and table layouts in Oracle, enhancing the UI/UX of a project management service for 1000+ internal users
- Integrated apps with Git and Azure DevOps CI/CD pipelines, ensuring reductions in deployment latency

Electronics Technician Intern, Garmin – Olathe, KS — August 2021 – December 2021

- Led a team of 5 interns to build a transistor tester utilizing oscilloscopes, multimeters, and soldering techniques
- Wrote detailed documentation for the product's features and procedures, boosting testing accuracy by 70%

Projects

CPU and Assembler – *VHDL, Quartus II, Python* — 2023

- Full-fledged CPU including components such as ROM, RAM, ALU, registers, I/O, state machines, etc.
- Utilized finite state machine (FSM) design principles to create a well-structured control unit
- Built a Python assembler that reads assembly language scripts to run programs on FPGA board

Coral Reef Annotator – *Python, OpenCV, TensorFlow, Keras* — 2023

- U-NET segmentation ML model to classify reef islands for climate change impact research
- Leveraged Python ML libraries to annotate 1,500+ atoll images and achieve F1 scores of ~86%

Sudoku Solver – *Java, Git* — 2022

- Created a Java algorithm simulation and 9x9 board generator for solving Sudoku boards
- Solved boards with 90% efficiency, including output statistics displaying total time and comparisons

Leadership

Co-President, Colby Robotics — October 2023 – Present

- Established organizational structure, recruited members, and created project timelines for Micromouse
- Coordinated workshops including CircuitPython, Algorithms, Soldering, and 3D Printing