Richard Trinh

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Education

Colby College - B.A. in Computer Science, GPA: 3.74

May 2026

• Relevant Courses: Data Structures and Algorithms, Analysis of Algorithms, Object-Oriented Programming, Data Analysis and Visualization, Computer Organization, Computer Vision, Linear Algebra

Skills

Languages: Python, Java, C#, JavaScript, TypeScript, HTML, CSS, C, C++, Golang, SQL

Frameworks/Tools/Databases: React, Node.js, Next.js, .NET, Flask, Docker, Git, Postman, PostgreSQL, Oracle

Experience

CS Teaching Assistant, Colby College – Waterville, ME

September 2023 - Present

- Held weekly office hours to help students with DSA & OOP projects and concepts in Java
- Conducted code reviews on 30+ student projects to debug issues and provide constructive feedback

Software Engineer Intern, Terracon - Olathe, KS

June 2023 - August 2023

- Developed a microservice to automate invoice data collection with **C#, .NET, Azure, and Postman** by implementing JSON data retrieval on an **ASP.NET** backend server, reducing processing times by 90%
- Designed a .NET Blazor interface to store project searches and table view layouts with Oracle and SQL, improving the UX of Terracon's project management service for 100+ internal users
- Built robust automation flows for assigning tasks in **Power Automate**, increasing onboarding speed by 30%
- Integrated apps with **Git** and **CI/CD** including pull requests, code reviews, and unit/integration testing

IT Support Technician, Colby College – Waterville, ME

January 2023 - May 2023

- Consulted customers through phone calls, emails, and walk-ins, resolving 10+ tickets weekly
- Increased user satisfaction by assisting non-technical users with simplified guides and explanations

Projects

Micromouse Robot | *Python, CircuitPython, Git, Raspberry Pi*

February 2024 - Present

- Built a pathfinding robot prototype that utilizes shortest path algorithms to traverse toward the maze center
- Collaborated with student developers to implement movement functions in CircuitPython and Raspberry Pi

Scholarship Searcher App | *React Native, Flask, Firebase*

October 2023

- Designed a mobile app to help students find personalized scholarships based on user profiles and preferences
- Implemented Flask routes for login and utilized Firebase to store user and scholarship data

AI Video Summarizer | Next.js, React, GPT-3 API, YouTube API, PostgreSQL

March 2023

- Created a full-stack video transcript summary and quiz AI generator for study enhancement
- Developed RESTful API routes in **Next.js** for chunking and analyzing text via tokenization to GPT-3.5

Coral Reef Annotator | *Python, OpenCV, TensorFlow, Keras*

January 2023

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

Leadership & Activities

Co-President, Colby Robotics

October 2023 - Present

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

Dataiku Hackathon, 1st Place in ML Modeling

October 2022

• Led a team of 3 to create ML models from 1,000+ BTM Nest data points using Python and Dataiku