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 | *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**

Scholar Ninja | *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

Vidsnap | *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**