

# CAMERON TREDoux

📞 719-460-2828 ✉️ [camtredoux@gmail.com](mailto:camtredoux@gmail.com) 🌐 [github/camerontredoux](https://github.com/camerontredoux) [linkedin/camerontredoux](https://www.linkedin.com/in/camerontredoux) 🧑 [camtredoux.me](https://camtredoux.me)

## EDUCATION

### University of Colorado at Boulder

Bachelor of Science in Computer Science

Transfer Excellence Scholarship

**August 2022 - May 2024**

Boulder, CO

Cumulative GPA: 3.92/4.00

### Western Colorado University

Rady Merit Scholarship, Academic Leadership Program Scholarship

**August 2020 - May 2022**

Gunnison, CO

## EXPERIENCE

### Software Engineering Intern

Keysight Technologies

**June 2022 - Present**

Colorado Springs, CO

- Engineered a RESTful email API for the digital marketing team that sent 5.7 million emails and reports each month.
- Designed email templates that could dynamically render thousands of data points sent from our API using SendGrid.
- Implemented the API using AWS Lambda and API Gateway to send emails in under 100 milliseconds.
- Developed a dashboard for visualizing hundreds of scheduled IT jobs using Next.js, React, and AWS Amplify.
- Utilized Scrum to develop and complete stories, delivering biweekly demos to stakeholders.

### Software Engineering Intern

Next Level Analytics (Startup)

**January 2022 - June 2022**

Remote

- Helped raise \$3,000 in funding from Iowa State University to build the platform and host services on Microsoft Azure.
- Deployed three data pipelines using Python scripts to acquire serialized JSON from major social media APIs.
- Modeled dynamic plots in React to visualize real-time analytics of a user's social media influence.
- Designed NoSQL database schemas in Google Firestore to store all user's data models.

### Supplemental Instructor

Western Colorado University

**August 2021 - May 2022**

Gunnison, CO

- Spearheaded three weekly 1-hour supplemental instruction lessons for Intro to C++ where I incorporated ideas from class with concrete examples while focusing on collaboration, group study, and one-on-one interaction among 5-10 students.
- Graded assignments for 20 students in data structures and tutored mathematics and data structures at tutoring center.
- Assisted physics department by setting up and attending physics labs each week while offering help with Excel and physics concepts for 20 students.

## PROJECTS

### Vex Collective - Data Aggregation | TypeScript, Next.js (GitHub | Demo)

**August 2022 - Present**

- Serialized over 40 API endpoints from Destiny 2 API for users to make POST and GET requests and obtain detailed information about their characters in JSON format.
- Analyzed hundreds of data points for any specified user for visualization in radar charts, heat maps, and graphs to help users understand their play style.
- Visualized thousands of game items and data from the Destiny 2 API Manifest and provided front-end for users to view images of their inventory.
- Managed an OAuth2 authorization flow to expose access to protected Destiny 2 API endpoints.

### Kōgan - Discord Bot | Rust, GraphQL (GitHub)

**May 2022**

- Developed bot using serenity-rs and GraphQL to interact with AniList API to support dozens of requests per second.
- Delivered front-end through Discord API for displaying facts about a show, the countdown until that show, and an up-to-date list of the top ten shows for that week.
- Implemented means to track one's favorite show while adding a voting system to encourage user interaction on Discord servers.

### KanaTUI - Terminal User Interface | Rust (GitHub)

**June 2022**

- Designed terminal UI application in Rust to help practice translating all 46 Japanese hiragana characters.
- Architected simple finite state machine to handle pagination and application flow from one section to the next.

## TECHNICAL SKILLS & INTERESTS

**Languages:** TypeScript, JavaScript, HTML/CSS, Python, Rust, C++, Java, MySQL

**Technologies/Frameworks:** AWS, Agile/Scrum, Jira, React, Node, Git, REST, GraphQL

**Developer Tools:** Linux Command Line, Neovim, VS Code, IntelliJ IDEA/PyCharm

**Hobbies:** Chess, Speed Cubing, Anime, Foreign Languages, Rock Climbing