

CAMERON TREDoux

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EDUCATION

University of Colorado at Boulder

Bachelor of Science in Computer Science
Transfer Excellence Scholarship

August 2022 - May 2024

Boulder, CO

Cumulative GPA: 3.92/4.0

Western Colorado University

Rady Merit Scholarship, Academic Leadership Program Scholarship

August 2020 - May 2022

Gunnison, CO

EXPERIENCE

Software Engineer Intern

June 2022 – December 2022

Keysight Technologies

Colorado Springs, CO

- Engineered RESTful email API for 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 API using SendGrid.
- Implemented API using AWS Lambda and API Gateway to send emails in under 100 milliseconds.
- Developed 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.

Supplemental Instructor

August 2021 – May 2022

Western Colorado University

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.

Human Resources Intern

July 2017 – December 2019

Air Academy Federal Credit Union

Colorado Springs, CO

- Handled on-boarding employees and processing employee benefits, dealing with monthly expenses of more than \$50,000.
- Compiled 200-page report for board of directors for merger with 30 credit unions in Colorado by analyzing credit union assets, expected financial growth, and population density and growth.

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, SQL

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

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

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