

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

Keysight Technologies

June 2022 - Present

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

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.

Human Resources Intern

Air Academy Federal Credit Union

July 2017 - December 2019

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