

Etienne Rousseau

510-298-2864 | erousseau@ucdavis.edu | www.linkedin.com/in/etiennerousseau1 | github.com/EtienneRousseau1

EDUCATION

University of California Davis

Davis, CA

B.S in Computer Science (3.9)

September 2022 - June 2026

- Relevant Coursework: Object-Oriented Programming, Data Structures and Algorithms, Artificial Intelligence

EXPERIENCE

Software Engineer Intern - Data Platform Engineering

December 2024 – Current

Tesla

Fremont, CA

- Spearheading the development of a Database-as-a-Service (DBaaS) platform to streamline provisioning for over **10,000** on-prem databases and virtual machines, reducing request time from **days to under 10 minutes**
- Built a metadata microservice using FastAPI and MongoDB to define over **50+** schema and object templates, enabling dynamic integration with downstream workflows and supporting microservice-based orchestration
- Launched a cluster identifier tool to determine primary or secondary status reducing process time by **98.6%** in Go
- Implemented a topology management system to enable real-time visualization and editing of 3000 hosts across PostgreSQL, Redis, and MongoDB systems, ensuring seamless interaction with distributed databases
- Built and hosted a query-by-example tool using Go and Linux to improve database visibility and query efficiency

Software Engineer Intern - Cloud Services

June 2024 – September 2024

HashiCorp

San Francisco, CA

- Transformed an existing open source diagnostics tool for HashiCorp products into a comprehensive library in Go
- Implemented multiple output formats for diagnostics data, improving usability and accessibility for support teams
- Improved the latency of the core algorithm by approximately **27%** for diagnostics generation reports
- Worked with 5 engineers to create a Request for Comments (RFC), ensuring alignment and thorough documentation of the project's objectives and processes
- Coordinated with 4 product support teams to ensure the final solution effectively addressed diverse requirements
- Built a new metrics system tracking enterprise usage of HashiCorp Products, improving reliability to 99.9%

Software Engineering Intern

June 2023 – September 2023

Pampa Technologies

Fremont, CA

- Engineered a dynamic web application enabling real-time monitoring of automated guided vehicles (AGVs) through Python and React, interfacing with PLC boards to retrieve live data streams.
- Leveraged TypeScript, .NET, and gRPC to seamlessly incorporate custom filtering and pagination functionalities
- Developed a web application with a new authorization system with Angular, C++, and Azure DevOps for hosting

Developer

September 2023 – May 2024

Codelab

Davis, CA

- Led a cross-functional team of seven in designing and developing a comprehensive dashboard
- Created a full-stack application utilizing FastAPI, Next.js, and MySQL, enabling potential investors to access comprehensive company metrics such as funding details and industry affiliations

PROJECTS

LocalFlair | React, Go, Postgres, Docker

April 2024 – June 2024

- Orchestrated the development of a feature-rich platform, employing React.js with TypeScript for frontend interactivity and Go (Golang) for backend scalability for robust server-side functionality
- Developed features like artisan profiles, product listings, unique user login, cart features, and allowing users to edit or delete their own profiles
- Leveraged PostgreSQL for managing database security for artisans and Google OAuth 2.0 for authentication
- Used cloud deployment strategies for scalability and reliability with Docker allowing for easy implementation

SKILLS

Languages: Python, Go, MySQL, Java, C/C++, Postgres, MongoDB, .NET, Node, Javascript

Frameworks: FastAPI, React, NextJS, Flask, Angular, Typescript, Express, Django, Sass, Tailwind, Prometheus

Developer Tools: Linux, Git, Docker, Kubernetes, Azure DevOps, AWS, GRPC, Protobuf, Swagger

Fluent: Spanish