

Moussa Haidous

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Mountain View, CA

EXPERIENCE

Software Engineer

July. '22 – Present

Matroid – Product – Palo Alto, CA

- Migrated product off of a **5+ year old deprecated NodeJS CMS** ridden with **50+ critical security vulnerabilities** using **AST transformations**, enabling upgrades to other vulnerable dependencies.
- Built a **MongoDB cleanup service** with support for customizable policies including orphan, foreign key integrity checks, & topological ordering. Reduced cloud deployment data by over 100GB, resulting in approximately a **5% monthly cost reduction** in AWS S3 expenses.
- **Developed a declarative granular attribute access control (ABAC) system**, complementing our existing imperative permission control system to meet enterprise customer demands. Initially conceived during quarterly hackathons and awarded 1st place.
- **Served as the Directly Responsible Individual (DRI)** for a Multiple Object Tracking (MOT) feature, orchestrating collaboration among the deep learning, infrastructure, and product teams.
- Developed a custom video player with filtering options and **in-browser exporting using FFmpeg in WASM**.
- Migrated product off a CRA/Pug hybrid application NextJS, **enhancing load times**, implementing **server-side rendering**, and improving **developer experience**.
- Developed a **GitHub Actions artifacts viewer** for internal use. It supports viewing GA job logs, in addition to internal artifacts (e.g. video recordings) & test machine logs side-by-side. It additionally supports many DX-focused features like **line offset scroll locking**, **timestamp scroll locking**, global log searching, deep linking, etc. Initially conceived during quarterly hackathons and awarded 1st place.
- Built a **real-time collaboration environment** into our annotation tooling using **WebSockets** to improve the user experience of our annotation studio.
- Created **idempotent APIs** that bulk-create configured resources in our product reducing customer setup time in our on-prem offerings.

Part-time Software Engineer

Sept. '21 – May '22

Murex – Build Systems – Beirut, Lebanon

- Built & deployed internal **Java gRPC microservices** to **aggregate data** on **production build processes**.
- Designed & enforced **quality gates** on build processes such as **build time & output size**.
- Engineered an **API Gateway** using **Java Spring** to translate **RESTful** requests into **gRPC** calls.
- Developed a custom **Java Nexus Repository Manager 3** recipe to enable **build caching & decrease development time**.

Software Engineering Intern

Jun. '21 – Aug. '21

Murex – Build Systems – Beirut, Lebanon

- Optimized the **speed performance** of a frequently used **Python** internal tool by **15x**.
- Built **Jenkins pipelines** to accelerate development and deployment of the tool.
- Developed a **Flask RESTful service** that provides an API for the tool which facilitates its usage by Murex engineers.
- Designed & deployed an **Angular dashboard** to display **aggregate data & indicators** generated by the tool.
- Implemented **additional features** for the tool that **improve the quality of life** of development teams across Murex.
- Managed the **incremental deployment** of the new tool version across the Murex production codebase.

EDUCATION

Lebanese American University | Bachelor of Science in **Computer Science**

May '22

- Cum. GPA: 3.98/4.0

SKILLS

- Languages:
JS/TS, Python, Java
- Technologies:
NodeJS, Spring Boot, Flask, MongoDB, PostgreSQL, React, NextJS, Jenkins, GitHub Actions, Docker, Kubernetes,