

Moussa Haidous

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Mountain View, CA

EXPERIENCE

Software Engineer

July, '22 – Present

Matroid – Product – Palo Alto, CA

- Led a **multi-month migration** off of KeystoneV4, a deprecated NodeJS CMS ridden with **50+ critical security vulnerabilities**. That additionally unlocked the ability to upgrade some of our other vulnerable dependency versions.
- Designed & deployed a **MongoDB cleanup service** with support for **custom cleanup policies** that runs daily. We were able to decrease the amount of data stored in our cloud deployment by **100+GBs** and decreased our monthly **AWS S3 costs by ~5%**.
- Spearheaded the incremental development of **declarative granular attribute access control (ABAC) system** that worked hand-in-hand with our previous imperative permission control system to directly deliver on our growing enterprise requirements from our customers. This project was initially built as a part of our **quarterly hackathons and was awarded 1st place**.
- Was the **Directly Responsible Individual (DRI)** of a **multiple object tracking (MOT) feature** where I coordinated efforts between our deep learning, infrastructure, and product team, in addition to developing a custom video player w/ filtering options and in-browser exporting by utilizing **FFmpeg in WASM**.
- Managed a **multi-month migration** from a **CRA/Pug** hybrid application to **Next.JS**. We were able to improve load times, make use of server-side rendering (SSR), and improve developer experience.
- Developed & deployed 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. This project was initially built as a part of our **quarterly hackathons and was awarded 1st place**.
- Restructured our monorepo to use **yarn workspaces** & then began the process of adopting monorepo tooling like **NX**
- Built & integrated 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 which decreased the amount of time required to get a customer setup in our on-prem offerings.
- Developed a **flow-based interface for the product** that permits the creation of custom workflows that hook into our different features allowing further customizability and freedom without infringing on our low-code/no-code promise which allowed our Sales team to build client-specific demos without the need of the deep learning team. This project was built as a part of our **quarterly hackathons and was awarded 1st place**.

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