**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** hybridapplicationto **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