

Moussa Haidous

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EXPERIENCE

Software Engineer

Dec. '25 - Present

Meta – Wearables

- Primary systems engineer on a first-party **ML gesture recognition system** for smartglasses. Owned the full pipeline from model deployment to remote config, telemetry, & on-device testing across **4 hardware platforms** simultaneously.
- Architected a **plugin-based postprocessing system** to reduce missed touch gestures across devices, eliminating per-platform code duplication. Ramped improvements to **full production rollout** via A/B testing. Combined ML + sensor heuristics achieved **73% false positive reduction**.
- Deployed ML models to a **new hardware platform end-to-end**: model integration, sensor calibration, IMU-based tap gating, & remote config. Navigated a launch blocker & coordinated cherry-picks into the shipping build.
- Fixed a **production timing bug** causing gesture misclassification across all shipped devices & diagnosed a **hardware bug** causing 20 kHz spurious interrupts on a capacitive touch sensor.
- Built a **synthetic gesture injection framework** for on-device ML testing without physical sensor input
- Built a **watchOS benchmarking app** that established competitive parity in wrist-gesture detection accuracy.

Senior Software Engineer

June. '24 - Dec. '25

Strava – Trust & Safety

- Worked with internal ML teams to **build spam detection systems**, including risk scoring models that proactively identify suspicious behavior.
- Built scalable **real-time proactive scanning pipelines** to facilitate analysis and logging of abuse patterns across the product.
- Implemented **Elasticsearch indexing for abuse reports**, improving retrieval latency and supporting advanced moderation tooling.
- Engineered a **URL stripping and link management microservice**, enhancing link safety while retaining analytics capabilities.
- **Designed and deployed a secure one-time password (OTP) system**, integrating it with internal authentication workflows and leading security reviews.
- Collaborated closely with third-party penetration testers to audit systems and remediate vulnerabilities in line with industry best practices.
- Adopted and operationalized continuous deployment practices, enabling safer, faster production releases with improved rollback mechanisms.

Software Engineer

July. '22 – June '24

Matroid – Product

- Developed a declarative granular **attribute-based access control / authorization system** to meet enterprise customer demands.
- Built an application-level deployment-agnostic **task scheduler** with an easy-to-use interface to power recurring tasks e.g. daily database cleanups (**5% monthly cost reduction**), data ingestion, etc..
- Engineered an environment-agnostic **data migration service** to facilitate release, increase feature velocity, and consolidate initial db seed data formats.. Supports change logs & rollbacks.
- Reworked our Docker images to utilize **multi-stage builds** which resulted in **5+ gbs of image size reduction** & improved image build speeds w/ smarter caching.
- Developed a **GitHub Actions artifacts viewer** with support for many developer-focused features including log viewing w/ timestamp based scroll-locking, selenium recording playback, etc..
- Improved our JS test running performance for both development & CI environments by **~2.5mins** by using modern rust-based compilers.
- Introduced an **application-wide structured logger** with support for different formats & transports e.g. JSON to loki, plaintext w/ ANSI color codes for the console, etc..
- Worked with 3rd-party penetration testers to triage & respond to several testing rounds.

EDUCATION

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

May '22

- Cum. GPA: 3.98/4.0