Mai Khuu, PharmD

Software Engineer

PROFESSIONAL EXPERIENCE

Co-Creator/Software Engineer,

2023 - present

Laridae (laridae-migrations.github.io)

- Developed Laridae, a Zero-downtime, reversible, schema migration tool in PostgreSQL with prebuilt integration into GitHub Action workflows.
- Engineered operations using multi-version concurrency control, sophisticated PostgreSQL views, triggers, and connection control functions, enabling seamless database access for multiple application versions with distinct schemas.
- Conducted load testing with simulated traffic for databases upto 10 million rows.
- Designed and implemented a custom GitHub Action that streamlines CI/CD integration with AWS infrastructure deployment and removal, utilizing ECR, AWS CLI, ECS Fargate, Docker, and Terraform, among others.
- Authored a comprehensive case study discussing Laridae's problem domain, system design, and key engineering decisions. This case study is available at *laridae-migrations.qithub.io*
- Collaborated remotely with a team of three engineers through daily standups and mob programming sessions.

Full Stack Web Developer, Freelance

2020 - present

Independently developed open-source applications including:

- BinVitation A webhook receiver service to collect and inspect HTTP traffic sent to a generated endpoint (Node.js, Express, Tailwind CSS, CockroachDB, DigitalOcean, Nginx)
- ApplianceWiz A CRM solution tailored for appliance repair businesses with an integrated resource allocation protocol (Ruby, Sinatra, PostgreSQL, HTML, CSS)

Office Systems Coordinator, Fast Appliance Rescue

2020 - 2022

- Managed software systems, including CRM, advertising, and accounting applications.
- Designed end-to-end architecture for all business websites optimized for SEO and user experience.
- Performed database assessment, and analyzed business data to evaluate trends and mitigate risks

Community Pharmacy Practice, CVS Pharmacy

2015 - 2020

- Managed daily pharmacy operations at medium to high-volume stores, including patient interaction and counseling.
- Maintained precise medication records and inventory. Conducted vigilant drug reviews to identify
 medication errors and drug interactions.
- Collaborated with other healthcare providers to optimize patient outcomes.

EDUCATION

SKILLS

Doctor of Pharmacy, *Purdue University* 2018 | West Lafayette, IN

Programming Languages (Ruby, Javascript, Go), Frameworks (Sinatra, Express, Node, React, SQL, HTML, CSS, Tailwind), Databases (PostgreSQL, MongoDB, CockroachDB),

Languages (Vietnamese, English)