

HUY LAI

Austin, Texas, United States of America

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EDUCATION

Texas A&M University | College Station, TX

Master of Computer Science

Aug. 2024 — May 2025

GPA: 3.700 / 4.000

Texas A&M University | College Station, TX

BS in Computer Science, cum laude, Minors: Cybersecurity, Mathematics

Aug. 2021 — May 2024

GPA: 3.594 / 4.000

EXPERIENCE

Software Engineer | Visa — Austin, TX

Aug. 2025 — Present

- Engineered a Kafka MCP Server to automate resource provisioning via Jira, GitHub, and Wiki integration, reducing developer onboarding time from weeks to days.
- Collaborated in agile teams to deliver features for real-time payments and BNPL platforms.
- Enhanced user experience by optimizing UI performance and implementing clean, maintainable APIs across e-commerce applications.
- Diagnosed and escalated critical bugs, enhancing system reliability and browser compatibility.

Software Engineer | Total Care 2U — Waxahachie, TX

Jul. 2024 — Jul. 2025

- Automated the end-to-end ETL (Extract, Transform, Load) process for migrating patient medical data into an advanced Electronic Health Record (EHR) system.
- Validated patients' personal information for accuracy and completeness to ensure data integrity.
- Designed automated quality assurance procedures to verify data consistency across systems.
- Presented progress demos to cross-functional teams to ensure stakeholder alignment and gather feedback.

Product Owner and Developer | BVCOG — Bryan, TX

Aug. 2023 — Dec. 2023

- Spearheaded the development of a scalable full-stack application using Ruby on Rails, capable of managing over 400 contracts simultaneously.
- Implemented and rigorously tested 85+ individual features using Cucumber and RSpec to ensure high-quality code delivery.
- Facilitated requirement gathering as primary liaison between developers and stakeholders, driving iterative feedback loops.

TECHNICAL SKILLS

Languages: Java, Python, C/C++, Ruby, SQL, JavaScript, TypeScript

Frameworks & Libraries: React.js, Next.js, Node.js, Ruby on Rails, PyTorch, TensorFlow, Scikit Learn

Tools: Git, GCP, AWS, VS Code, IntelliJ, Eclipse, Firebase, Pub/Sub

Accessibility: WCAG, ATAG, ARIA

PROJECTS

Improving CLIP Training | *torch, Self-Supervised Learning, Contrastive Learning*

Aug. 2024 — Dec 2024

- Optimized bimodal contrastive SSL models using global contrastive loss for scalable image-text learning.
- Implemented SogCLR/iSogCLR, enhancing retrieval accuracy and zero-shot classification.
- Analyzed optimizers and loss functions to improve model convergence and multimodal generalization.

ScriptSearch | *Python, Cloud Functions, Firebase, Pub/Sub, Typesense*

Jan. 2024 — May 2024

- Built a transcript-based YouTube search engine with fast, keyword-driven results and timestamped links.
- Engineered a scalable scraping pipeline using Golang, Pub/Sub, and Firebase Functions.
- Achieved sub-4s average query time across 250+ videos using Typesense indexing.
- Delivered a full-stack app in 15 weeks through Agile development and user-driven design.