Kian Lak

469-888-9817 | lak.kian.ca@gmail.com | linkedin.com/in/kian-lak | github.com/kianlak

Experience

Software Engineer Intern May 2025 – Aug. 2025
Paycom *Irving, TX*
- Implemented a secure login system for internal tooling by integrating **LDAP** and **Active Directory**, enabling authentication and access control for **10,000+** developers, significantly improving security and maintainability
- Built and deployed a notification system to alert internal users of all production-breaking changes of our application, projected to reduce response time by up to **60%** and enable faster recovery during critical releases
- Optimized internal **React** application by implementing code splitting and bundle size reduction, decreasing initial load time by **33%** and improving overall user experience for **1000+** developers

Software Engineer Jun. 2023 – Sep. 2024
Cognizant *Plano, TX*
- Engineered a high-performance microservice **REST API** with **Java Spring Boot**, designed for scalable data processing with strict validation and modular deployment, improving reliability across the backend system
- Integrated **AWS CodePipeline** and **AWS EC2** to automate deployment of **REST APIs**, increasing infrastructure reliability and reducing manual errors in delivery workflows for **100,000+** users
- Utilized **Redis** for caching frequent **API** responses, significantly reducing latency by **41%** and improving response speed in **Java-based microservices** deployed via **AWS**

Software Engineer Intern May 2022 – Aug. 2022
Interactor *Remote*
- Designed a machine learning–based error detection module with **82%** accuracy to scan client invoices and identify anomalies, helping prevent costs of up to **$5000 - $10,000** per client
- Leveraged precision PDF parsing tools to detect document structure enabling accurate extraction of structured data from unstructured documents and reducing manual processing time by over **70%**

Software Engineer Intern May 2021 – Aug. 2021
Zeal IT Consultants *Dallas, TX*
- Developed a distributed, object-oriented chat system in **Python** using socket programming, asynchronous message queuing, and session persistence allowing **100+** concurrent users to chat with low-latency performance
- Built a **Python REST API** that filtered and prioritized results using data-driven algorithms and leveraging collected metrics to enhance relevance - leading to a **84%** accuracy
- Proposed and implemented **front-end** and **back-end** features that enhanced the performance, usability, and responsiveness of Zeal IT Consultants' customer-facing website, improving overall user engagement

Projects

Reinforced Learning Tic Tac Toe | *Python*
- Designed and trained a reinforcement learning agent using **Q-learning** for tic-tac-toe, enabling the model to learn optimal strategies through self-play and dynamic reward adjustments
- Optimized a classification model with **scikit-learn**, tuning hyperparameters to reach a **5% loss rate**
- Built a simulation environment in **Python** to train and test reinforcement learning agents, applying **object-oriented principles** and modular design patterns for scalability

LifeProd | *Electron, React, HTML, CSS, Vite, Spring Boot, Maven, Java, MySQL, REST API*
- Developed a secure system with session management and security filter chains, ensuring protection of user data
- Designed and implemented a data-driven recommendation algorithm that analyzes user fitness activity to provide personalized exercise guidance
- Built a responsive fitness tracking interface using **React** and **REST APIs**, optimizing **fullstack** performance

Technical Skills

Languages: Java, Python, Javascript, Typescript, MySQL, PostgreSQL, HTML, CSS, C, C++, C#
Frameworks: React, Angular, Spring Boot, Next.js, ASP.NET, Node.js, Vite, JUnit, Jest, Electron
Libraries: PyTorch, NumPy, Scikit-learn
Tools & OS: Git, Docker, VS Code, Redis, AWS, S3, EC2, Elastic Beanstalk, CodePipeline, Linux, Window

Education

University of Texas - Dallas Richardson, TX
Master of Science in Computer Science *Aug. 2024 – Present*

University of Texas - Dallas Richardson, TX
Bachelors of Science in Computer Science — Cum Laude *Aug. 2019 – May 2023*