Kien To

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WORK EXPERIENCE

Amazon.com May 2023 – Sep 2023

ML Engineer Intern

Sunnyvale, CA

- Developed an AI-driven debugging tool that allows 3 partners to troubleshoot Fire TV apps from laptops.
 - o Eliminated > 150 hours of on-device debugging annually, resulting in potential \$10,000 cost avoidance.
 - o Optimized application testing workflows, significantly reducing average cycles from 30 to under 2 hours.
- Created an AI-enhanced library that leverages React-Native-Web, enabling 90% code reuse between TV & web.
 - o This library was adopted by two teams, leading to a 30% reduction in web prototype development time.
 - o Set up CDK, authentication, CI/CD pipeline, automated bash scripts, and deployed the tool using AWS.
- Developed 10 high-performance C++ proxy resolvers to securely retrieve data for the debugging tool.

UMass-Amherst Sep 2022 – May 2023

Human-Computer Interaction Lab - Research Assistant

Amherst, MA

- Developed an API in Python using NLP/ML models to automatically summarize attendee feedback:
 - o Enhanced inclusion in 66 public town halls, boosting participation rates by 35%.
 - o Research was published at the premier ACM.
- Applied networking, Linux, and OS expertise to deploy and optimize API infrastructure.
- Cached data in Redis, optimized database queries, and handled pulse inputs from 500+ attendees.

Techfarm May 2022 – Sep 2022

Software Developer Intern

Hanoi, VN

- Led the design and implementation of three key pages on the Tokenplay NFT platform, incorporating AI optimizations to drive over 200,000 unique visitor engagements.
- Wrote 20 API endpoints using Go and PostgreSQL:
 - o Deployed with Kubernetes on AWS, using Jenkins and Linux.
 - o Reduced memory usage and latency by 20 percent through refactoring for lazy loading and cache.

Sciquel (Harvard Innovation Lab Startup)

Sep 2021 – May 2022

Software Engineering Intern

Remote

- Co-led an 8-member development team in building a RESTful server from the ground up, utilizing Python, NodeJs, MongoDB, and Docker.
- Created the author's page, news page, and 10+ other front-end components using NextJs and GraphQL.

EDUCATION

University of Massachusetts, Amherst

Dec, 2024

BS and MS, Computer Science with Artificial Intelligence Concentration

Amherst, MA

- 3.96/4.0 GPA; Magna Cum Laude; Teaching Assistant CS 220, CS 320, CS 250.
- Bay State Fellow: MS fellowship awarded to 8 students each year which covers 100% tuition + TA Stipend.

Projects

- <u>PW-Cracker</u>: An AI-enhanced password cracking tool leveraging distributed systems to decrypt passwords.
 Utilizes C++ & OpenMPI across Virtual Linux Machine clusters for efficient parallel processing.
- British Tobacco American Hackathon: Led a team of 4 to design a mobile app using AI to facilitate waste management solutions. Ranked 2nd out of 400 teams, securing \$5,000.

Skills & Leadership Activities

- Skills: Python, Java, Go, C/C++, Typescript, SQL, React, AWS, Linux, Node, ReactNative, Kubernetes, Docker, Spring.
- Leadership activities: ML Club Executive Lecturer, Data Science Club Director, BUILD UMass Tech Lead.