TRI MAI-QUOC

+84327204690 | mtri0162@gmail.com | Tri (Quoc) Mai | mtriSE

Thu Duc, Ho Chi Minh city - Vietnam

OBJECTIVE

Passionate about Computer Science, I am seeking an entry-level position that allows me to apply my programming, problem-solving and analytical thinking skills to drive innovation and deliver results. I am committed to continuous learning and professional development to excel in my career.

EDUCATION

• **Ho Chi Minh University of Technology** *Sep 2021 - Present*
Computer Science (Bachelor of Engineering) Ho Chi Minh, Vietnam

◦ GPA: 3.50/4.00

◦ Relevant Coursework: Programming Fundamentals, **Advanced Programming**, **Data Structures and Algorithms**, **Operating Systems**, Computer Network, **Database Systems**, Principles of Programming Languages, **Web programming**, **Software Engineering**,

EXPERIENCE

• **Tego Global., JSC** [🌐] *Jan 2024 - July 2024 (6 months)*
Software Engineer Intern Ho Chi Minh, Vietnam

◦ **Technical Stack**: JavaScript, NestJS, Prisma, PostgreSQL

◦ Played a pivotal role in a team with **6** members to implement an scalable internal platform.

◦ Employed **event-driven programming** in combination with **asynchronous** techniques to optimize web operations, achieving a **50%** improvement in site performance.

◦ Integrated **Google Analytics service** to generate comprehensive reports and **real-time** dashboards to visualize user interaction data, capture detailed insights into user activities, including page views, clicks, form submissions, and other key interactions.

◦ Facilitated seamless integration of the **SaaS** as Slack with existing systems, achieving a big reduction in notification latency, ensuring timely delivery of notifications.

◦ Implemented **cron-based** scripts to schedule and automate data crawling from third-party public APIs, reducing manual data retrieval time by **100%**, ensuring up-to-date information and increasing data freshness by **50%**.

PROJECTS

• **Operating System Simulation: [A simulation of a basic kernel]** *March 2023 - June 2023*
Tools: [C, Makefile, Git, Shell Scripting, GNU/Linux] [🔗]

◦ Designed and implemented the scheduler with **Multi-Level Queue** (MLQ) policy used in Linux kernel.

◦ Designed and simulated the **memory mapping** between CPU and RAM for each process

◦ Demonstrated the **physical memory** in virtual and implemented the **swapping** mechanism

◦ Implemented the **paging-based address translation** in a single-level paging system

◦ Leveraged **ANSI C** libraries in combination with **POXIS standards** to build the simulation.

◦ Automated the build process using **Makefile** for efficient project compilation and management

• **SmartFarm IoT: [Multi-disciplinary project of CS and CE]** *Jan 2024 - May 2024*
Tools: [Flutter, ExpressJS, MySQL] [ ]

◦ Integrated **Computer Vision** to detect the pests and diseases in leaves with an accuracy up to **82.35%**

◦ Designed, implemented, and optimized entry-point APIs and functions for a NodeJS runtime server, enabling communication with both mobile and edge devices through **MQTT** and **HTTP** protocol, resulting in an **80%** improvement in response latency compared to using only the pure Adafruit server.

◦ Designed and optimized the database, reducing data redundancy and improving query efficiency.

ADDITIONAL INFORMATION

Languages: English (**800 TOEIC**), Vietnamese (*Native level*)

SKILLS

- **Programming Languages: C/C++**, **Shell Scripts**, **Python**, JavaScript, Java
- **Software Development Technologies:** NodeJS, NestJS, ExpressJS, Spring Boot, Prisma, HTML/CSS
- **Database Systems:** MySQL, PostgreSQL, MongoDB
- **Data Science & Machine Learning:** Scikit-learn, TensorFlow, PyTorch
- **DevOps & Version Control:** Git, GitHub, Docker, Makefile
- **Mathematical & Statistical Tools:** R, MATLAB

CERTIFICATIONS

- **Google:** Google Cybersecurity Professional Certificate
- **Standford University:** Machine Learning Specialization
- **Udemy:** Flutter & Dart - The Complete Guide
- **Udemy:** Linux Administration: The Complete Linux Bootcamp
- **Udemy:** Cisco CCNA 200-301 - The Complete Guide