TRI MAI-QUOC

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OBJECTIVE

Seeking a challenging position in Computer Science to leverage my expertise in Software Development. Aiming to contribute to innovative projects at the intersection of being infatuated with math & technologies and practical problem-solving in fields such as optimizing & development methodologies.

EXPERIENCE

- **Tego Global., JSC [🌐]** *April 2024 - July 2024 (3 months)*
  Software Engineer Intern Ho Chi Minh, Vietnam
  - Played a pivotal role in a team with **6** members to implement an internal, scalable **Content management system** solution, might be supporting up to **+100 users at the same time**, with slow latency.
  - 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 Slack bot API 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%**.

EDUCATION

- **Ho Chi Minh University of Technology** *Sep 2021 - Present*
  Bachelor of Engineering (Computer Science) Ho Chi Minh, Vietnam
  - GPA: 3.50/4.00

PROJECTS

- **Operating System Simulation: [A simulation of a basic kernel]** *March 2023 - June 2023*
  Tools: [C, Makefile, Git, Shell Scripting, GNU/Linux] [ ]
  - Collaborated with others to develop a simulation of a simple Operating System (OS) by implementing asynchronous & synchronous theories.
  - Designed, and simulated major components in a simple operating system: **scheduler**, **synchronization**, related operations of **physical memory** and **virtual memory**
  - Used GNU/Linux libraries in combination with **POXIS standards** to build the simulation. Besides that, we also use **Makefile** for controlling and building the source code more effectively.

- **SmartFarm IoT: [Multi-disciplinary project of CS and CE]** *Jan 2024 - May 2024*
  Tools: [Flutter, ExpressJS, MySQL] [ ]
  - 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.
  - Integrated Computer Vision to detect the pests and diseases in leaves with an accuracy up to **82.35%**
  - Designed and optimized the database, reducing data redundancy and improving query efficiency.

SKILLS

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

Certifications

- **Certification A** *Month Year*
- **Certifying Body:** Certification B *Month Year*
- **Certifying Body:** Certification C *Month Year*
- **Certification D** *Month Year*

Additional Information

Languages: English (*Intermediate level*), Vietnamese (*Native level*)