TRI MAI-QUOC

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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, **Mathematical Modelling**, **Advanced Programming**, **Probability and Statistics**, **Database Systems**, Principles of Programming Languages, **Digital Image Processing and Computer Vision**, **Machine Learning**, **Data Mining**, **Big Data Analysis & Business Intelligence**

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*)

ACADEMIC ACTIVITIES

- **IAS Laboratory - Research Assistant** *March 2024 - September 2024*

  Ho Chi Minh University of Technology - Vietnam National University [ ]
  - ○ Researched and implemented algorithms for speech recognition.
  - ○ Extracted and processed speech data for experiments.

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