Tran Quoc Huy

Software Developer

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SUMMARY

I possess a deep enthusiasm for programming, dedicating a substantial amount of time to contribute to the open-source community and develop educational projects. This commitment has been instrumental in initiating my journey as a software engineer.

Currently, I am actively seeking a full-time intern or fresher position to advance and apply my skills.

SKILLS

Programming: C/C++, JavaScript/TypeScript, Python, Java, C#, Bash

Front-end: HTML/CSS, ReactJS, Android - Java

Back-end: NodeJS, RESTful APIs, Websocket, Webhooks

Embedded: Arduino, ESP-IDF

Databases: MongoDB, Firebase, MySQL, GraphQL Deployment: Github Actions, Nginx, Docker, AWS

Tools: Git, Unix Shell, Postman, VS Code, Android Studio

Others: Linux OS, network administration

Projects

Video meeting and messaging web app | NodeJS, ReactJS, MongoDB, AWS (EC2,S3)

June 2023 - Present

- Created and configured the project, set up the development environment, and managed the AWS console (as a full-stack developer in a team of 2)
- \bullet Designed and developed RESTful API endpoints for CRUD operations with MongoDB and implemented user authentication with JWT
- Gained hands-on experience with front-end optimization techniques, e.g., code bundling, code splitting, lazy loading
- Utilized the video meeting feature on the web browser through WebRTC
- Used the Socket.io library and MongoDB event-watcher for the implementation of real-time content updating
- Implemented programs for user-generated media content transferring, access controlling with JWT, and AWS S3 pre-signed URLs
- Automated code-building and deployment processes with GitHub Actions, Docker, and Bash scripts
- Gained hands-on experience in configuring Nginx and setting up SSL, DNS

My personal homepage | TypeScript, HTML/CSS, Vite, ReactJS, Github Pages

Dec 2022 - Present

- Achieved Lighthouse overall score of 99 (Performance: 97, Accessibility: 100, Best practices: 100, SEO: 100)
- Learned SEO and web performance optimization best practices
- Enhanced vanilla CSS skills (flexbox, SVG animation, keyframes, transition, media query)
- Gained hands-on experience integrating Github APIs

Linux shell greeting script | Bash, C++

Jan 2024

- Developed a program that greets the user every time they open a new Terminal, displaying useful system and network information
- Developed the main script in C++ using various optimization techniques, ultimately outperforming any program that shares the same idea in terms of execution time
- Wrote installer and uninstaller scripts for convenient use
- Implemented a method to install a dispatcher script that is automatically triggered by the network manager service to fetch network information from a public API and cache it locally for the fastest execution time of the main script
- Deepened understanding of the Linux OS and acquired system monitoring skills

Smarthome solution | Android (Java), ESP32-IDF, Firebase, ChatGPT, Google Speech

June 2023

- Developed an Android app for visually or verbally managing/controlling devices in the smart home by integrating ChatGPT and Google Speech services
- Utilized ChatGPT's function calling feature to control IoT devices, making the smart home intelligent with the power of ChatGPT
- Implemented a WiFi and user-credentials configuring method for headless IoT devices by utilizing the ESPTOUCH protocol
- While programming for the IoT devices, gained expertise in working with Firebase real-time database REST APIs, and specifically implemented a real-time data event listener without external libraries (pure C language and the HTTP client)

EDUCATION

HCMC University of Technology and Education

July 2020 - Present

B.S. Embedded Systems and Internet of Things

Specialized High School Nguyen Tat Thanh

June 2017 - June 2020

Specialized in Physics

COMMUNICATION

Vietnamese

Native language

English

TOEIC 625 (reading, listening)

Comfortable in both spoken and written communication

2022