TRONG HAI NGUYEN

Software Engineer (Back-end and Mobile)

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EXPERIENCE

Software Engineer - Viettel AI

Integrate AI models, Back-end, Mobile

March 2022 – Now Hanoi, Vietnam

- Designed and developed a back-end module at the server that scans necessary notification campaigns table and sends detailed notifications to each user. **(Spring Boot, MySQL, MongoDB)**
- Integrated face-detection, face-extraction, face-pose, finger-detection, . . . and some image algorithms such as brightness check, blurry check, and specific processing logic for each problem. (see more in PROJECTS section) **(Android)**
- Developed a time-keeping management application, which assists users and managers in being at work on time and remembering timekeeping. **(Flutter)**

Software Developer Intern - FPT Software

C#/.Net in Sharepoint

Jul 2021 - Oct 2021 Hanoi, Vietnam

- Maintained web applications: edit HTML, CSS, Javascript, etc.
- Developed new features when updates were required.

HONORS

- Graduate Representative spoke at the 2023 Graduation Ceremony.
- Speaker at “Win U Game season 1 - Tips for survival at university”.
- Speaker at “2019 Learning Methods Conference”

ACHIEVEMENTS

- 2019: The Excellence Scholarship of Hanoi University of Science and Technology.
- 2023: THIRD PRIZE (Top 4) Viettel hearted AI challenges 2023.
- 2021: IMPRESSIVE AWARD (Top 04 Call for Code) IBM Hackathon.

TECHNICAL SKILLS

- **Spring Boot**, MySQL, MongoDB, Android, Design, etc.
- **Java (Spring Boot and Android)**, Kotlin, Flutter, C/C++, etc.

PERSONALITIES

- Clever, Confident, Creative, Agile, Adaptable.
- Disciplined, Calm, Honest, Supportive, Independent.

EDUCATION

Computer Engineering (BEng)
- CPA: 3.74 out of 4.0

Hanoi University of Science and Technology

August 2018 – May 2023

Higher Secondary - Mathematics

Bac Giang High School for Gifted Students

2015 - 2018

Outstanding Graduate Student Award 2023.

PROJECTS

Timekeeping

- I integrated face detection and face extraction models. Besides online mode, I had to implement offline mode timekeeping. The challenge was to save a maximum of K images for each face within T seconds, and this process had to repeat every T seconds. In online mode, saved images had to be resent, and the currently recognized user would be greeted with a voice and their information displayed on the screen.

Electronic Know Your Customer (eKYC)

- I integrated face detection and face pose models to authenticate the customer’s face, including checking face-liveliness. Additionally, I implemented NFC to scan ID card information.

Face Liveliness

- I customized the system for a more effective liveliness check. The challenge involved recording the moving face from far to near process with numerous navigation guides. Subsequently, I had to develop an algorithm to select K images from the recording process.

Finger Scan

- The primary task involved processing the image after being detected. We had to convert the image to match the corresponding user’s image in the customer’s database (not shown) and save it in the .wsq format.

Thesis Project

- The main concept of the project was to monitor GNSS (Global Navigation Satellite System) signals and detect interferences.
- The primary process was built upon the GNSS_SDR open source. My role was to extract some calculated results and further process them to obtain the precise data needed.
- The project required proficient programming skills and systematic thinking.