Nguyen Thanh Toan

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ABOUT ME

I am a (about to) fresh graduate from Ho Chi Minh City University of Technology, major in computer science. I having been programming for 7 years. I have experience working as an backend developer for an e-commerce platform. I am flexible in what I can work in as I am quick to pick up new knowledge, skills and I am eager to learn more.

EDUCATION

- Ho Chi Minh City University of Technology (Bach Khoa TP.HCM).
- Computer Science Major.

ACHIEVEMENTS

- •3rd prize in VietNam national Informatics contest (2018).
- Participated in several national and regional ACM-ICPC contests (national 2019, regional 2020, 2021, 2022).
- •Codeforces max-rating 1900 (candidate master).

EXPERIENCE

- Participated in several competitive programming contests.
- Experienced in working with teams in agile framework.
- Experienced in using version control tool (Git, Github, Gitlab).
- Experienced in SQL database (Postgres, MySQL).
- Familiar with containerization technologies (Docker, Kubernetes).
- Experienced in using and designing REST and gRPC API.
- •Experienced in many programming languages (C/C++, Python, Go, C#, JavaScript, TypeScript)

PROJECTS

Smart Grid (Nov 2022 - May 2023)

github.com/thanhtoan1742/smart-grid

github.com/thanhtoan1742/smart-grid-cpn-wsn-based-model

- Designed mathematical model to represent smart grid components, connections and their behaviors.
- Designed algorithms that analyze state space generated from the model to solve many optimization problem related to load distribution.
- Implemented the model and algorithms in C++ and Python to run the a scientific experiment for a to be published IEEE paper.

Tekone - Inventory Service (May 2022 - Oct 2022)

- Developed incoming warehouse feature to handle incoming order for omni-channel retail platform.
- Developed many watch-dog to clean up inventory data (clean up faulty stock, clean up unused warehouse) for omni-channel retail platform.
- Resolved many technical debts presented in the in-house developed reliable asynchronous messaging system.

Coneveth (Mar 2022 - Apr 2022)

github.com/thanhtoan1742/Coneveth

- Developed a server and a mobile application for a simple IOT system.
- Server controls IOT devices and communicates to broker through MQTT protocol.
- Mobile application built using Unity engine, displays status of IOT system and sends command to broker and server to control IOT devices.

NP Video Streamer (Oct 2021)

github.com/thanhtoan1742/NPVideoStreamer

- Developed a video streaming application that use standard RTSP and RTP protocol.
- Server side application handles incoming request for video, reads the from storage and stream the video over the internet.
- Client side application handle user's input, send request to server (RTSP) and displays the stream of video (RTP).

Simplified Green House Model (Nov 2020 - Jan 2021)

github.com/thanhtoan1742/SimplifiedGreenHouseModel

- Developed weather simulation in a greenhouse model proposed by Vanthoor (2011) that helps monitor and predict future weather conditions in a greenhouse.
- Developed algorithm that uses simulated information to predict future weather condition (through a combination of ODE solver and artificial intelligence).

MIPS Assembler and Runner (Nov 2019 - Dec 2019)

 $\underline{github.com/thanhtoan 1742/MIPS-Runner}$

- Developed an assembler that translates MIPS assembly code.
- Developed an CLI-based application that runs programs written in MIPS.