Huy Nguyen Duc

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EDUCATION

National University of Singapore   Aug 2024 – May 2028

Bachelor of Computing in Computer Science
- Specialization: Parallel Computing and Distributed System, Algorithms and Theory
- ASEAN Scholarship Holder: Full tuition fee and living allowance
- Internship availability: May 2026 – Aug 2026 (full-time)

EXPERIENCE

Research Assistant   Sep 2023 – Jan 2024

Hanoi International Research Center for AI (HUST)
- Participated in implementation and optimisation PC algorithms about Causal Graph, improving computational efficiency by 20%
- Built preprocessing pipeline for sign language videos (scraping + OCR), generating dataset of 72 hours of annotated data to train translation model

PROJECTS

Online Judge for Competitive Programming (https://oj.hncode.edu.vn)
- A website for Hanoi students to learn and practice competitive programming, with 2000+ users and over 3000+ daily submissions
- Developed backend system using C++ to integrate programming problems from Polygon (Codeforces tool) into web platform
- Implemented a test file caching mechanism, reducing cloud storage usage and cutting server costs by 60%.

Survival Game (**https://github.com/huy297/MyGame**)
- Developed a 2D game for an advanced programming course using C++ and SDL2 library
- Improve BOT movement and attack behaviours by modifying shortest path algorithm like Dijkstra and BFS, resulting in more human-like actions and smoother gameplay with significant improved FPS

Chatting App (**https://github.com/huy297/HaSun**)
- Built the frontend using React and Vite
- Designed and implemented Django REST API and WebSocket for real-time messaging

Movie Platform(**https://github.com/huy297/movie-app**)
- Built the frontend using React and Vite
- Designed the backend with Golang, integrating Redis and MySQL for efficient data storage and retrieval

ACHIEVEMENTS
- Rank 18 in International Collegiate Programming Contest **(ICPC**) – Jakarta Asia Regional (2024) (**C++**)
- Second Prize in International Collegiate Programming Contest (**ICPC**) – Ho Chi Minh Asia Regional (2022) (**C++)**
- First Prize (Rank 7/400) in Vietnamese Olympiad in Informatics (2023) (**C++**)
- Participated in Vietnam International Olympiad Team Selection Test (2023) (**C++**)

SKILLS

- **Languages:** Python, C++, Java, Typescript
- **Frameworks and Libraries:** Pytorch**,** Tensorflow, Django, Express JS, Socket.io
- **Tools:** Redis, PostgreSQL, Linux, MongoDB