HA THU TRAN

COMPUTER SCIENCE / QUANTITATIVE FINANCE UNDERGRADUATE @ NUS
www.tranhathu.com • tranhathu@u.nus.edu • linkedin.com/in/tran-ha-thu • github.com/oeggy03

EXPERIENCE

Data Analysis / Machine Learning Intern • Housing Development Board (HDB) **May 2024 – Present**

- Utilized machine learning, data analysis and software engineering to drive business processes in HDB.

Tech Lead • CareForWe (Healthtech Startup) **Dec 2023 - Present**

- Managed and led both front-end and back-end development of a video hosting website.

Teaching Assistant • National University of Singapore **Aug 2023 – Present**

- Rated 4.8/5.0 in the student feedback exercise (Department average: 4.3).
- Taught programming concepts, JavaScript, and Python to students through self-prepared tutorial sessions.

Data Engineering Intern • Eastspring Investments **May 2023 – Aug 2023**

- Maintained production and raw tables for the company's database using Python and SQL.
- Optimized and helped develop an Artificial Intelligence chatbot using ChatGPT's API.

Artificial Intelligence Intern • A*STAR - SCEI **Dec 2019 – Jan 2020**

- Programmed and trained a working robot arm capable of image recognition using Python and OpenCV.

EDUCATION

Bachelor of Computing – Computer Science (Honors) **Aug 2022 – May 2026**

National University of Singapore (NUS)

GPA: 4.7 / 5.0 (First Class Honors)

- Invited to work for CVWO and become a teaching assistant for 3 programming modules.
- Organized: Freshman Social Camp 2023, RAG 2023, FLAG 2023, Tembusu College photography club EXCO, NUS Origami Club EXCO, Lifehack 2024 hackathon.
- Residential Assistant for AY24/25 at UTown Residences.

SKILLS & TECH STACKS

- **Programming Languages:** Python • Java • Go • C • C++ • JavaScript
- **Frontend:** HTML • CSS • ReactJS • Tailwind CSS
- **Backend & Databases:** Fiber (with Go) • express.js • REST APIs • AWS Cloud • PostgreSQL • MySQL • Microsoft SQL Server

ACHIEVEMENTS

- 1st runner up for the SMU Hack for Cities (Quantum Computing) Hackathon 2023.
- Dean's List and Academic Excellence Awardee in 2022.

PAST PROJECTS

Personal Website: https://www.tranhathu.com/

- Used React, HTML, CSS, *and* JavaScript to create a website that showcases all my work and experiences.

Task-tracking chatbot

- Used Java, JavaFX while utilizing OOP to create the bot and Git and GitHub for version control.
- Link to user guide, project description and releases: https://oeggy03.github.io/ip/

Telegram Bot for loaning of equipment

- Used Python, Google Sheets and Telegram APIs to create a Telegram Bot to facilitate the loaning of camera equipment in Tembusu College.

Telegram Bot with image recognition capabilities

- Used Python, TensorFlow and OpenCV to train the model on the CIFAR10 dataset, and the telegram API.
- Link to project: https://oeggy03.github.io/TeleAI/

BUDDY4GOOD Website (Hack 4 Good Hackathon Project)

- This website pairs up the able-bodied and those with disabilities/special needs, to combat stigmatization and encourage both parties to spend time doing everyday activities together.
- Used React, HTML, CSS, JavaScript for the frontend, Go for the backend and MySQL for the database.
- Created and used REST APIs to facilitate communication between the frontend and backend.
- Link to project: https://devpost.com/software/buddy4good

Forum Website

- Used React, HTML, CSS, JavaScript for the frontend, Go for the backend and MySQL for the database.
- Used REST APIs for communication between the frontend and backend, and jwt tokens and bcrypt for secure user authentication.
- Link to project: https://devpost.com/software/buddy4good

Telegram Bot for food wastage reduction (Lifehack 2022 Hackathon Project)

- Used Python, SQLite, telegram API and google maps API to design a telegram bot that serves as a platform for people to share their unused ingredients and leftover food.
- Link to project: https://devpost.com/software/kalilinux

Trash Clearing Robot Arm

- Used Python and OpenCV to train an AI model to recognize and pick up trash with a UR5 robot arm.
- Link: https://sites.google.com/view/tjc-wow-2020/home/astar-scei/tran-ha-thu