

HA THU TRAN

COMPUTER SCIENCE / QUANTITATIVE FINANCE UNDERGRADUATE

I am a fast learner and hard worker who has practical experience with Software Engineering, Data Engineering and Artificial Intelligence. I have extensive experience with multiple tech stacks and languages and am currently pursuing the AWS Cloud Practitioner certification.

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<https://github.com/oeggy03>

EXPERIENCE

Data Analysis / Machine Learning Intern

Housing Development Board Singapore (HDB) – Business Intelligence Team

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 – School of Computing

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 – Data and AI

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, with Quantitative Finance & Management minors

GPA: 4.7 / 5.0 (First Class Honors)

National University of Singapore (NUS)

Aug 2022 – May 2026

- Invited to work for CVWO and become a teaching assistant for 3 programming modules.
- Attained A grades for all programming, SWE, and math modules so far.
- Helped organize: 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.

A-Level Certificate, Junior College & Secondary School

Grade (A-levels): 90/90 Rank Points

Temasek Junior College

Jan 2016 – Dec 2021

- Executive Committee Member for the Infocomm Club.

SKILLS

- React, HTML, CSS, JavaScript
- Go & Fiber, SQL, express.js, REST APIs, AWS Cloud
- Python, Java (& JavaFX), C, C++
- Git, Jira, Excel, Microsoft Suite
- Data Engineering
- Software Development
- Mathematics
- Artificial Intelligence

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://oeggy03.github.io/>

- 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>