

EDUCATION

National University of Singapore

Bachelor of Computing in Computer Science, Second Major in Statistics

Aug. 2023 – May 2027 (Expected)

Current GPA: 4.55/5.0 (Ongoing)

TECHNICAL SKILLS

Languages: Python, C++, Java, Javascript/Typescript, SQL

Developer Tools: Git, Jupyter Notebook, Docker, AWS

Frameworks: React, NextJS

Libraries: Scikit-Learn, Pytorch, Tensorflow, Keras, Pandas

PERSONAL PROJECTS

ReinventingTheWheel | C++, MLPack

May 2024 - Present

- Developing a simple and understandable library of C++ header files to perform simple machine learning computations.
- Built to be lightweight and easily implemented into C++ programs to process data stored in .csv files.
- Features include saving and loading of pre-trained models and a general neural network accuracy of approximately 95%.

MedExtension | Javascript, OpenAI

December 2023

- Developed a Chrome extension leveraging OpenAI's GPT-3.5 Turbo model to generate summary text for highlighted snippets of text on online medical documents.
- Submitted along with a CRUD forum website built using Typescript, NextJS and MongoDB.
- Made for Health Hack 2024 as a first hackathon project as the only programmer in the team.

ArknightsParticles | Typescript, ThreeJS, GLSL

December 2023

- Built with Typescript and ThreeJS by reverse-engineering a particle effect from a game website.
- Refactored and optimized outdated GLSL shaders and ThreeJS code in favour of the latest functionalities.
- Migrated project from an outdated React framework to NextJS and deployed on Vercel.

Digits Predictor Webapp | Tensorflow, HTML, CSS, Javascript

December 2023

- Trained a Tensorflow convolutional neural network to predict digits given a handwritten image with 97% accuracy.
- Used TensorflowJS to import model in JSON format and handle predictions.
- Created a canvas component to generate data arrays from handwritten user input, used by the model to generate predictions.
- Model confidence is then plotted using ChartJS.

Portfolio Website | Typescript, React, NextJS, ThreeJS

December 2023 – Present

- Picked up web-development tools such as Typescript, Tailwind, NextJS and ThreeJS to build a feature-rich portfolio website.
- Self-learnt React and the NextJS framework and learnt ThreeJS to add 3D elements to the website.

EXPERIENCES

Software Engineering Intern | Video Analytics

May 2024 – Aug 2024

Kabam Robotics

- Developed and implemented object-based tracking algorithms for production fleet of security robots.
- Dockerized software and pipelined image fragments for processing on cloud APIs through using Amazon Web Services.
- Authoured comprehensive documentation and improved code scalability to ease technical debt.

Member – Vice-President

August 2023 – Present

NUS/RC4 AI (Residential College 4 | National University of Singapore)

- Learnt more about machine learning and artificial intelligence as a member of NUS AI, a student union group partnered with AISG in providing AI related education to members.

Member

August 2023 – Present

OrcaCode (Residential College 4 | National University of Singapore)

- Learnt more about computing coursework and competitive programming problems through joining a residential college coding interest group.

Mapping Operations Coordinator

November 2022 – January 2023

GrabTaxi Holdings Pte Ltd

- Updated information within databases through daily deployment to partners and vendors operating under Grab.
- Reviewed, updated and ensured quality and accuracy of information in online systems.
- Provided data for a pilot system under development.
- Involved in other ad-hoc and miscellaneous duties.