

Jethro Chia

+65 8644 2279 · 230740A@mymail.nyp.edu.sg · Singapore
github.com/Shockz132/Portfolio

DIPLOMA HOLDER

A Fresh Graduate, passionate about computers and coding, a curious problem-solver with a love for exploring new technologies. Always eager to learn and grow, wanting to create innovative and impactful solutions that contribute to society.

EDUCATION

Nanyang Polytechnic

Electronic and Computer Engineering
3.94 CGPA

03/2023 - 04/2026

Academic Achievements

- Awarded Director's List (AY2023)
- Awarded Director's List (AY2024)
- Awarded Director's List (AY2025)
- Distinction in Analytical Geometry, Applied Calculus, Advanced Calculus
- Awarded A*STAR Scholarship (2024)
- Volunteered in the Peer Tutoring Program (2024)

Woodgrove Secondary School

GCE 'O' Levels
L1R4 - 14

01/2019 - 07/2022

Academic Achievements

- Achieved Edusave Eagles award (2022)
 - Achieved Most Improved Student (2019)
 - In Charge of Logistics for Badminton (2022)
 - Assistant in Charge of Logistics for Badminton (2021)
-

WORK EXPERIENCE

Agency for Science, Technology and Research

02/2025 - 04/2025

Research Assistant

The Agency for Science, Technology and Research (A*STAR) drives mission-oriented research that advances scientific and technological discovery.

Achievements/Tasks

- Machine Translation & Text Style Transfer Project
- Developed and fine-tuned machine translation models (e.g., Transformer, BERT), improving translation quality by 20%
- Implemented text style transfer algorithms, achieving 15% improvement in style preservation accuracy
- Optimized preprocessing workflows, reducing data cleaning time by 25% using Python, Pandas, and SpaCy
- Evaluated models with custom metrics (BLEU, TER), enhancing model assessment efficiency by 30%
- Collaborated on research publications, contributing to cutting-edge NLP innovations
- Familiar with Python, TensorFlow, PyTorch, Hugging Face, NLTK, SpaCy, Scikit-learn

The Hong Kong Poly University

12/2026 - 02/2026

Research Assistant

PolyU is a leading university and one of the best universities in HK with world-class research in multiple disciplines making bold advances to break new ground.

Achievements/Tasks

- Designed and implemented predictive models using machine learning algorithms (e.g., Random Forest, SVM, Neural Networks), improving prediction accuracy by 18%
- Conducted data analysis and feature engineering, reducing data noise by 25% and enhancing model performance
- Developed and deployed real-time machine learning pipelines, improving model deployment speed by 30%

- Performed model evaluation and hyperparameter tuning, increasing model efficiency by 20% using Python, Scikit-learn, and TensorFlow
 - Familiar with Python, Scikit-learn, TensorFlow, Pandas, NumPy, Jupyter Notebooks, Matplotlib
-

SKILLS

Web Development:

- Proficient in HTML, CSS, JavaScript, Typescript, React. Experienced in creating dynamic, user-friendly web applications using modern frameworks and libraries such as NextJS, React, Node.js, ShadCN UI.
- Created a Logic Gate Circuit Solver website for users to create a logic gate circuit using the drag and drop UI and generate the respective truth table for the circuit. Built using React, Javascript, React Flow, Node.js, C.
- Developed a Smart Gardening website for an automated gardening farm. Users have real time monitoring and data analytics on their plants, viewed from the dashboard hosted on a web server. Built using Javascript, Typescript, React, NextJS, ShadCN UI, Spline 3D.
- Developed a Food Stall website to showcase and promote a food stall's menu, pricing, and their operating hours. Allow customers to order online or through a mobile app. Built using HTML and Vanilla CSS.

Backend Development:

- Proficient in Python, C, SQL, Node.js. Experienced in developing backend functionality, integrating APIs, and managing databases. Skilled in creating scalable server-side solutions that work seamlessly with frontend components.
- Developed a web server for a Smart Gardening website for an automated gardening farm that handles requests from the website as well as sending data to the website to ensure the dashboard is updated live in real time. Built using Python, C, SQL (SQLite).

Automation & AI Tools:

- Proficient in Python, spaCy, Git, Github. Experienced in using Python for automating workflows and scripting tasks. Familiar with spaCy for AI-related projects, and proficient with Git and Github for version control and collaborative development.
- Collaborated with a team on a Full Stack IoT Smart Gardening website for an automated gardening farm using Github.
- Integrated a chatbot using spaCy into the website of the Smart Gardening website.
- Developed multiple open source projects on Github both personal and for school.

Effective Communication & Collaboration:

- Collaborated with teams on more than 10 different projects, overseas and locally.
 - Resolved multiple conflicts during projects with effective communication.
-

CO CURRICULAR

Nanyang Polytechnic

- Badminton (Vice Captain), 2024-2025
 - Played an Active Role in Recruitment and Organising Team events
 - Achieved 2nd in the POLITE Competition

Woodgrove Secondary School

- Badminton (In Charge of Logistics), 2021-2022
 - Played an Active Role in handling transportation of equipment to the venues
 - Achieved 4th in the "B" Division Competition
-

HOBBIES / INTERESTS

- Cooking
- Digital Art
- AI & Machine Learning
- Software Development
- Computer Engineering

REFERENCES

Nanyang Polytechnic

Mr Toh, Personal Mentor / Course Manager
+65 6550 0672
toh_weizhong@nyp.edu.sg

A*STAR

Mr Tan Xin
Tan_Xin@i2r.a-star.edu.sg

LANGUAGES

- English (Native or Bilingual Proficiency)
 - Chinese (Limited Working Proficiency)
-