ZHAO QIXIAN

CONTACT

- Email: qzhao010@e.ntu.edu.sg
- LinkedIn: https://www.linkedin.com/in/zhaoqixian
- WhatsApp: +65 8386 8786

Blog: https://travel.zhaoqixian.com
GitHub: https://github.com/ZhaoQixian

EDUCATION

Nanyang Technological University, Singapore Aug 2023 – May 2027
- Bachelor of Science in Data Science and Artificial Intelligence, Minor in Business, Year 4
- CGPA: 4.55/5.00, First Class Honours Degree Expected
- Major Electives: Intelligent Agent, Cloud Computing, Data Mining, Natural Language Processing

École Normale Supérieure – Paris Sciences et Lettres Université, Paris, France Jan 2026 – May 2026
- Semester Exchange in Département d'Informatique: Machine Learning, Cryptography, AI in Finance

Seoul National University, Seoul, South Korea Jun 2024 – Jul 2024
- Summer Exchange in Department of Economics: Game Theory

Nanyang Junior College, Singapore Feb 2021 – Nov 2022
- Achieved 4 Distinctions (A) in 4 H2 subjects in Singapore A Levels.

Catholic High School, Singapore Feb 2019 – Nov 2020
- Achieved 10 Distinctions (8 A1 and 2 A2) in Singapore O Levels. Top in 2020 cohort.

LANGUAGES

- English (Native), Mandarin (Native), French (Limited)

HONOURS

Science and Engineering Scholarship - MOE Sponsored Aug 2023 – May 2027
- A 4-year full scholarship covering university education, with 6-year bond to work in Singapore

Senior-Middle 1 Scholarship - MOE Sponsored Feb 2019 – Nov 2022
- A 4-year full scholarship covering 2-year secondary and 2-year junior college education

TECHNICAL SKILLS

- Programming Languages: Python, R, Java, JavaScript, SQL
- Agentic Platforms: Codex, Claude Code, Antigravity, GitHub Copilot
- Frameworks: PyTorch, LangGraph, OpenCV, YOLO, Scikit-learn, BERT, Flask
- Developer Tools: Linux, Docker, Azure, GitLab, gRPC, CI/CD, Power BI, Excel, UiPath

WORK EXPERIENCE

Alstom, Singapore Jun 2026 – Aug 2026
Data Science Intern
- Developed isolation forest and random forest models for anomaly detection and predictive maintenance on train fleet R151 in EWL, NSL, and Bukit Panjang LRT.
- Designed Python ETL data processing pipeline for large scale train telemetry.
- Optimized timeseries processing and payload size to meet KPI requirements and integration constraints.
- Integrated templates onto production platforms Orbita and HealthHub through gRPC.

SLB – Schlumberger, Singapore Jul 2025 – Dec 2025
AI Engineer Intern
- Designed and deployed an enterprise level Document Package Verification Flask webapp that automates compliance checks using Retrieval-Augmented Generation (RAG) over Azure AI Search
- Implemented multi-stage filtering that cutting multimodal calls by ~70%, and overall cost by ~50%
- Developed hybrid retrieval with re-ranking and evaluation using query rewriting rules
- Created Analysis Report and Document Viewer side by side interface, with reference link to target chunk
- Productionized Azure AD Single Sign On with Role-Based Access Control (SSO/RBAC)
- First place winner for company level Power BI competition: Digital Twin and Production Management

RESEARCH EXPERIENCE

AnniZ Lab, NTU Jan 2026 – Present
Student Researcher Technical

- Work in Progress: Temporal Knowledge Graph and GNN for Gut Microbiome Hypothesis Generation

School of Mechanical and Aerospace Engineering, NTU Jul 2025 – Apr 2026
Student Researcher in URECA Program

- Deep Learning to Automate Detection of Scoliosis Cobb Angle from Clinical Paediatric Radiographs
- Trained models for spinal landmark localization, achieving mAP50 of 99.1% and recall of 97.0%
- Achieved clinical-grade measurement accuracy with a MAE of 3.43° and RMSE of 4.38°
- Collaborated with KK Women's and Children's Hospital and SingHealth Intellectual Property Office

National Institute of Education, NTU Oct 2024 – Jul 2025
Student Researcher

- Paper published and presented in ASEE Conference 2025 Montreal, Canada: Enhancing AI Literacy: Exploring Trust and Ethical Decision-Making through the Prisoner's Dilemma in Game Theory
- DOI: 10.18260/1-2--55858

Various Institutions, NTU Sep 2024 – Sep 2026
Research Assistant

- Processed audio language data using DaVinci Resolve and Excel (6 months with SOH)
- Hosted 11 sessions of eye-tracking data collection using Pupil Labs smart glasses (2 months with NBS)
- Conducted 22 one-on-one interviews for cognitive sessions (11 months with Centre for Lifelong Learning)

ACADEMIC PROJECTS

Final Year Project (School Project) Feb 2026 – Oct 2026

- State-Transition Incremental Maintenance and Subgraph Diffusion on Temporal Knowledge Graphs for Financial News
- https://hdl.handle.net/10356/235242

News Wikileaks Cross Analysis Feb 2025

- SMU Datathon 2025 Finalist. Top 10 out of ~70 teams.
- Created a Python analysis pipeline and a Streamlit application that analyzes the similarity between news and WikiLeaks documents using Fuzzy Matching and Sentence-BERT.

TrustHP Feb 2025

- First place winner of NTU WIT x HP (Hewlett-Packard) Ideathon competition, out of 20 teams.
- Conducted market analysis and proposed an innovative and feasible security-first framework

EatWellthy (School Project) Sep 2024 – Nov 2024

- Applied MERN Stack (MongoDB, Express.js, React.js, Node.js)
- Developed an interactive web app to revolutionize healthy eating through meal planning, nutrition tracking, AI-powered personalized plans, chatbot, Google SSO, location and calendar sync.
- Agile Development Team Leader of 6 and deployed independently.

iFound Feb 2024 – Mar 2024

- SimplifyNext x UiPath RPA Hackathon 2024 Finalist. Top 6 out of 46 teams.
- Developed an automation app to find potential missing people in Singapore. Built on UiPath, Python and OpenAI to perform website scraping, facial recognition and generate GenAI-summarized reports.

CO-CURRICULAR ACTIVITIES

Institution of Engineering and Technology NTU Branch (IET @ NTU)
Welfare Manager -> Welfare Head -> Vice President Aug 2023 – July 2026

- Emcee in Annual General Meeting 2023.
- Led welfare team for wellbeing arrangements in Annual General Meeting 2024.
- Led liaison teams to plan and conduct company onsite visits in 2025.

NYJC Chinese Cultural Society
Stage Videographer -> President Feb 2021 – Nov 2022

- Led the club of 35 members to organize Chinese drama performances, including Singapore Youth Festival 2022, annual performance 2022, NYJC Open House and promotional video.