# Zhao Shizhen

Singapore | 97855304 | zhaoshizhen04@gmail.com | www.linkedin.com/in/zhaoshizhen2004

## EDUCATION

**National University of Singapore**                                                                                                      **Singapore**
Bachelor's Degree in Computer Science w/ Double Major in Quantitative Finance (GPA 5.0)                    2025 – 2029
**Relevant Coursework:**
Programming Methodology I, Discrete Structures, Linear Algebra, Introduction to Quantitative Finance

## WORK EXPERIENCE

**National University of Singapore (NUS)**
*DevOps ML engineer, internal learning platform*                                                                        Jan 2026 – May 2026
• Trained LLM AI chatbot with internal knowledge base and Retrieval-Augmented Generation (RAG) techniques.
• Deployed models on AWS Lambda and Docker for scalable inference.
• Improved inference speed and accuracy by over 50% by implementing efficient chunking methods.

**SHOPEE**
*Product Manager Intern, Internal HR Systems*                                                                            Sep 2025 – Dec 2025
• Designed agentic AI workflows using prompt engineering and tool integration to streamline HR processes.
• Integrated LLMs with APIs, databases, and internal systems to automate workflows, reducing processing time by 90%.
• Coordinated with development team to schedule requests within quarterly roadmaps, balancing user needs with engineering bandwidth through impact and priority-based frameworks such as RICE scoring and North Star Metrics.

## PROJECTS

**Messenger – Django App with Web Sockets**
GitHub: https://github.com/shiverin/messenger
• Built a full-stack messaging app using Django, Daphne, and WebSockets.
• Deployed to production on Render with WhiteNoise for static asset handling and PostgreSQL for backend storage.

**Traffic Sign Classification with CNN**
GitHub: https://github.com/shiverin/CNNTraffic
• Achieved 98.97% accuracy on the GTSRB dataset by designing and optimising CNN architectures using TensorFlow.
• Built models with 3 convolutional pooling layers, fine-tuned depth and dropout parameters to improve generalisation.
• Employed Adam optimiser and categorical cross-entropy loss for efficiency and convergence.

## TECHNICAL SKILLS

**Languages:** Python, Java, C, JavaScript, SQL, R
**Full Stack Dev:** React, Django, Flask, FastAPI, REST APIs, Jinja, WebSockets, Redis, Gunicorn, Daphne, Whitenoise
**Platforms and Tools:** Git, Docker, R Studio, Tableau, Supabase, Render, Scikit-learn, TensorFlow, PyTorch

## HACKATHONS

**BrainHack by DSTA – Semi-Finalist**                                                                                              **Jun 2025**
• Fine-tuned a Whisper model on 4,500 audio samples, achieving 0.98% word error rate (WER).
• Trained YOLOv8 on a dataset of 10,000 labelled images of military vehicles, achieving 67% test accuracy.
• Built a ResNet18 + CRNN model trained on 6,000 scanned text samples, achieving 99% character-level accuracy.
• Implemented a single-policy multi-agent DQN in a custom Scout-vs-Guards environment using PettingZoo.

## INTERESTS & HOBBIES

• Classical musician (piano & violin), Orchestral Performance, Leetcode, Watch Collecting, Chinese Chess