Zhang Yangda

✉ yangda.zhang@u.nus.edu 📞 8433 6455 🔗 yyangdaa.github.io/github.io/ in linkedin.com/in/yyangdaa ⓞ yyangdaa

Education

National University of Singapore *Aug 2022 – Jun 2026*
B.Eng. in Computer Engineering with Second Major in Quantitative Finance *(Expected)*

- **Honours College:** NUS College – interdisciplinary curriculum with residential learning
- **Awards:** NUS Science and Technology Scholarship (Full Scholarship)
- **Coursework:** Data Structures and Algorithms, Machine Learning, Computer Organisation, Software Engineering, Artificial Intelligence, Quantitative Finance
- **Extracurriculars:** Captain, NUS College Table Tennis Team; Varsity Weiqi Player

National Junior College *Singapore-Cambridge GCE A-Levels; Grades: AAA/A* *Jan 2020 – Dec 2021*

- **Awards:** PRC SM1 Scholarship (Full Scholarship); Honorable Mention, Singapore Physics Olympiad

Experience

Quantitative Developer Intern *Singapore*
ODA Capital (under Octava Management) *Jul 2025 – Present*

- Developed Python pipelines for real-time Solana on-chain data from DEX liquidity and token prices.
- Built web-scraping systems to gather trading signals from X and integrate them into automated trading strategies.
- Implemented Python-based analysis pipelines to evaluate trade performance, exploring return distributions, parameter relationships, and probability-weighted outcomes.
- Suggested and implemented strategies that improved stability by reducing WebSocket/HTTP disconnections.

IT Developer Intern *Singapore*
Boston Scientific *May 2024 – Oct 2024*

- Developed backend services in Java/Spring Boot supporting internal order management systems across APAC.
- Designed and deployed RESTful microservices on AWS to integrate SAP order management workflows.
- Built a Python/OpenCV + PyTorch CV pipeline (YOLO detection, rectification, ZXing/Tesseract decode) to replace RFID for medical device barcodes, automating inventory counts with 98–99% first-pass accuracy (+2–3 pp).

Software Engineer intern *Guangdong, China*
Guangdong Tianyima Information *May 2023 – Jul 2023*

- Built an Android app using React Native and JavaScript, improving UI responsiveness and navigation for 400,000+ users.
- Enabled fast, efficient chat content search by designing a lazy-loading mechanism that indexes transcripts and fetches results on demand.
- Refactored chat file format for improved storage efficiency and introduced backward compatibility for legacy data.

Projects

Captcha Recognition and Synthesis System *Python, TensorFlow, OpenCV, CRNN*

- Developed a preprocessing pipeline using median blur to remove interference lines while preserving characters.
- Built an end-to-end CAPTCHA recognition pipeline combining CRNN-CTC models and CNN-based feature extraction.
- Achieved 96% character-level and 82% string-level accuracy, improving baseline by over 3x.

InstaFood *JavaScript, React.js, Firebase, Node.js, Express*

- Developed a full-stack food-sharing platform using React, JavaScript and Firebase
- Enabled dynamic community features including post interactions and real-time comment threads.
- Crafted responsive UI components with Material-UI, optimised for mobile.

BudgetBuddy *Java*

- Java-based command-line interface (CLI) for efficient personal finance management.
- Users can add expenses, view budgets, and track income via straightforward text commands.
- Source distributed as a downloadable JAR file; run it locally in your terminal for hands-on use.