

Chiang Qin Kang

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EDUCATION

National University of Singapore

Singapore

Bachelor of Computer Science

August 2023 - May 2027

- **Relevant Coursework:** Data Structures and Algorithms, Software Engineering, Computer Networks, Operating Systems, AI and Machine Learning

EXPERIENCE

TikTok

Singapore

Software Development Engineer in Test Intern

January 2026- August 2026

- Developed and maintained automated test suites utilizing **Python** and **TypeScript**, achieving full P0 and 95% P1 test coverage to increase developer confidence.
- Implemented technical solutions by configuring **CI/CD pipelines**, improving **system reliability** and uptime by 25%.
- Engineered a **TypeScript** and **Python**-based analytics pipeline integrating **SQL** data sources to support business requirements, automating reporting for cross-functional teams and reducing manual effort by **10 hours weekly**.
- Architected internal **FastAPI** bots to automate repetitive engineering workflows, accelerating release unblocking by 20%.

Synapse

Singapore

Full Stack Software Engineer Intern

May 2025 – December 2025

- Collaborated with ML engineers to develop and deploy **YOLOv8 computer vision models** using **Azure** and **Docker** to automate hospital workflow tasks, improving efficiency.
- Integrated **Angular** front-end with FastAPI back-end to support clinical trial applications, enabling real-time CV inference and reducing data processing latency by **50%**.
- Architected full-stack applications and worked in cross-functional teams, utilizing Redis and RabbitMQ message brokers to increase throughput by 50%.
- Engineered a **React** application for smart glasses equipped with IMU sensors to detect signs of dementia and neurodegenerative conditions, leveraging custom ML pipelines.
- Spearheaded development of sandbox to support on-device execution of Computer Vision models on mobile using **Flutter**, reducing development time by 80%

Razer

Singapore

Software Testing Intern

January 2023 – June 2023

- Developed virtual device emulation protocols, streamlining smoke tests and reducing physical hardware dependencies for test execution by **60%**.
- Designed and executed over 50 test suites with **Python**, **Selenium**, and **Robot Framework** for Razer Synapse.
- Automated smoke test reporting with **Testrail** and **Jenkins**.
- Collaborated with cross-functional engineering teams via Jira to triage and resolve 40+ critical pre-release bugs, ensuring production stability

PROJECTS

GiveMeASign | Full Stack Developer

June 2024 – July 2024

- Architected and deployed a full-stack web application to support accessible sign-language learning
- Led both front-end and back-end development, deploying the site with **Vercel** and **NextJS**.
- Designed the database layer with **PostgreSQL**, **Neon** and **Drizzle ORM**, and implemented secure user authentication via Clerk.
- Trained a proprietary machine learning model using **TensorFlow** and **Mediapipe** to classify Singapore Sign Language achieving 95% accuracy.

MediContacts | Full Stack Developer

October 2024 – November 2024

- Enhanced and maintained a desktop application for managing patient contacts and appointments.
- Led agile sprint planning for a cross-functional team of 4, translating requirements into technical solutions and ensuring 100% on-time feature delivery.”
- Improved the user interface using **JavaFX** to deliver a more intuitive and responsive user experience.
- Implemented test coverage using **JUnit**, achieving **90% coverage** and minimizing release regressions.

TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, Java, C, Rust, SQL, HTML/CSS, Bash, Dart, Golang

Web Frameworks: React, NextJS, Angular, NodeJS, FastAPI, Flutter, JavaFX, React Native

Databases: PostgreSQL, SQLite, MongoDB, Redis, Prisma

Machine Learning / AI: TensorFlow, Mediapipe, YOLOv8, OpenCV, scikit-learn, Pytorch, NumPy, Pandas

DevOps and Tools: Docker, Git, Vercel, Jenkins, Jira, Gradle, GitHub Actions, BitBucket, Terraform, RabbitMQ

Cloud: Azure, AWS

Testing: JUnit, Selenium, Robot Framework