

TAN SONG YUN

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PROFESSIONAL EXPERIENCE

Software Engineer Intern, Credit Suisse

May 2023 – Jul 2023

- Developed a high-usability data query tool in Typescript and Ant Design for Business Analysts and Product Teams, enabling search, view and extraction of financial data with autocomplete, tabination, bulk upload and export features
- Streamlined query processes by eliminating inefficiencies of manual data query in Elasticsearch query
- Implemented extensive test scripts, providing >95% code coverage for enterprise-wide production deployment
- Set up databases and endpoints with Kotlin and Spring Boot to store responses from a feedback widget

Software Engineer Intern, Ninja Van

Jun 2022 – Aug 2022

- Engineered an asynchronous system to automate the collection of cash-on-delivery payments from delivery drivers using DBS Bank API for cross-bank Giro payments (Go, Gin, Apache Kafka, Protocol Buffers, Rest APIs)
- Scheduled cron jobs with Quartz, managed databases with SQLBoiler, implemented unit tests with Ginkgo and MockGen, and deployed the software with Redis and Docker
- Designed a scalable, maintainable and fault-tolerant software architecture and database system
- Collaborated effectively with multiple stakeholders and engineering teams to align product closely to business needs

Software Engineer and Machine Learning Intern, DSO National Laboratories

May 2021 – Jul 2021

- Enhanced and adapted deep-learning models from erroneous baseline models to identify and remove text cleanly from images using OpenCV, Tensorflow, PIL, which was also subsequently integrated into other department projects
- Programmed a web-based application that deploys the models and displays images from a database along with an intuitive front-end editor to dynamically modify text on images using Vue.js, Vuex, Quasar, HTML Canvas

Full-Stack Software Engineer Intern, Yoozoo Games

May 2020 – Jul 2020

- Developed a robust AI receptionist chatbot with 10 functions using Rasa and Python under a tight deadline
- Built an interactive chatbot user interface with Speech-to-Text/Text-to-Speech capabilities for prospective MNC clients and internal projects using React.js, Node.js, HTML, CSS, Flask, Postman, Azure Cloud Services

App Development Intern, Defence Science Technology Agency (DSTA)

Jan 2019 – Mar 2019

- Programmed an Android application utilizing location services and Google Maps APIs to protect against public Wi-Fi exploits by hackers using Java and XML on Android Studio

ACADEMIC QUALIFICATIONS

Nanyang Technological University (NTU), Renaissance Engineering Programme (REP)

Aug 2019 – Dec 2023

Bachelor of Engineering Science (Computer Science) and Master of Science in Technology Management | CGPA: 4.65/5.0

- Renaissance Engineering Programme Scholarship

Hwa Chong Institution (Junior College)

Jan 2017 – Dec 2018

GCE 'A' levels | UAP: 88.75/90

- Hwa Chong Diploma with Merit, Edusave Entrance Scholarships for Independent Schools (EESIS)

CO-CURRICULAR ACTIVITIES

Project Lead, REP Humanitarian Engineers and Leaders (HEAL)

Sep 2019 – Sep 2021

- Led a team of 9 to engineer an energy and cost-efficient machine that generates water from atmospheric humidity
- Pioneered the project and established new partnerships with a venture capital firm and team of academics from NUS

RELEVANT SKILLS & PROJECTS

Languages: English (Native), Chinese (Full Professional Proficiency)

Programming/Markup Languages: Python, JavaScript, TypeScript, Go, Java, Kotlin, C, R, SQL, Matlab, HTML

Libraries/Frameworks: React.js, React Native, Gin, Spring Boot, Flask, Kafka, Vue.js, Quasar, Quartz, Pandas, dplyr

Other Technical Tools: Git, Scrum, Jira, Gradle, Maven, Node.js, PostgreSQL, SQLBoiler, JPA, Redis, Figma, Postman

Projects: Medical Records Application, Tinder for Movies Website, Passenger Volume Regression Model Predictor

Hackathons: CodeIT Suisse Top 10, GovTech Stack the Flag, Shopee Code League