TAN YI PENG

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Hey there! I am a results-driven and detail-orientated person with a strong passion for Cloud Solutioning, Artificial Intelligence and Cyber-Physical Systems. My goal is to integrate these skillsets harmoniously in order to engineer advanced systems and applications that effectively address challenges faced by enterprises and the community.

EDUCATION

Singapore Management University   **Aug 2021 – May 2025**
Bachelor of Information Systems with a Second Major in Computer Science (Cyber-Physical Systems)
GPA: 3.70/4.00 (Magna Cum Laude – High Distinction)
- Awarded Dean's List for Academic Year 2022-2023 for Stellar Academic Achievement

EXPERIENCE

Singapore Management University   **May 2023 – Aug 2023**
Research Intern
- Extended an Open CV GUI Perceptual Grouping Library to extract GUI elements from a mobile interface.
- Trained a Decision Tree and Multi-label Classification algorithm to predict human-perceivable permissions on widgets of Android Applications.

Tessaract.io   **Apr 2021 – Aug 2021**
Product Optimisation Intern
- Programmed a Slack bot using Slack API and Beautiful Soup Library to extract data on the company's drive queue and send notifications to alert the relevant personnel.
- Developed automated testing scripts with Selenium and Unit Test Framework to reduce the required testing time from 40 to 5 minutes.
- Developed data migration scripts in Python to migrate clients' data from their legacy applications to the company's database.

CO-CURRICULAR ACTIVITIES

SMU PAW (People For Animal Welfare)   **Dec 2022 – Present**
President
- Chaired an executive committee of 15 personnel to organise activities in championing animal welfare rights.
- Collaborated with both internal (SMU Office of Student Life) and external stakeholders (Sponsors) to ensure the smooth execution of events.

SMU Project Heartcode   **Feb 2023 – Present**
Project Co-Lead
- Oversaw the planning and implementation of Project Heartcode which aims to uplift underprivileged children who do not have access to quality IT education.
- Spearheaded an initiative to scale up our impact from 30 to 60 mentees for the 2023 run.

PROJECTS

FreshGo
- Devised a web application to address inefficiencies from a farmer's perspective by assisting water, fertilizer, and crop management while reducing agent costs.
- Utilised languages/frameworks and tools such as Docker, Vue.js, Bootstrap, MySQL, RabbitMQ, KONG API Gateway, and Python Flask through a microservices architecture.
- Achieved the highest grade attainable (A+) and was nominated for the VMware Tanzu Award.

SimplyLogs
- Co-developed using MERN Stack to improve the experience and accessibility of inventory/asset tracking by automating key processes like serialising, invoice generation, and accounting.

SKILLS & INTERESTS

- Attained AWS Solutions Architect , AWS Certified Practitioner Certification
- Participant of DSTA BrainHack CODE_EXP
- Software/IT skills: Python Flask, Django, React.js, Vue.js, Express.js, Java, SQL, HTML, CSS, Firebase, MongoDB, Selenium, Kubernetes, AWS, Data Structure and Algorithms, Object Orientated Programming, Relational Database Modelling
- Soft Skills: Leadership, Analytical, Responsible, Project management, Stakeholder Management
- Language fluency: Bilingual in English and Mandarin