Yi Jiahe

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STRENGTHS SUMMARY AND CAREER OBJECTIVE

I am deeply passionate in technology and excited to develop hardware and software solutions to improve people's lives.

WORK HISTORY

Automation QA, Shopee — Jul 2021 – Present

- Manage deployment of automation testing suite with Jenkins for continuous integration of the test build for the test environment and making use of testing suites such as the Golang test package for backend services and Cypress for frontend application testing.
- Developing and deploying tools to aid QA efforts.

EDUCATION

B.Eng, First Class Aerospace Engineering w/ Specialization in Mechanical Engineering — Jul 2017 – Jun 2021

Nanyang Technological University, Singapore

- CN Yang Scholars Programme
- CGPA: 4.90

GCE 'A' Levels — Jan 2013 – Nov 2014

Raffles Junior College, Singapore

PUBLICATIONS

J.H. Yi and S. Srigrarom, "Near-parallel binocular-like camera pair for multi-drone detection and 3D localization", IEEE 16th International Conference on Control, Automation, Robotics and Vision, (ICARCV 2020), 13-15 December 2020, Shenzhen, P.R.China.

J.H. Yi, K.H. Chew and S. Srigrarom, "Enabling Continuous Drone Tracking Across Translational Scene Transitions through Frame-Stitching", 2021 Second International Symposium on Instrumentation, Control, Artificial Intelligence, and Robotics (ICA-SYMP), 20-22 January 2021, Bangkok, Thailand.

RESEARCH EXPERIENCES

Professional Attachment — May 2020 - July 2020

Temasek Laboratories @ NUS

- Implemented an algorithm for the real time 3D tracking of multiple moving objects.

Research Attachment — Jan 2019 - Apr 2019

Nanyang Technological University, Digital Signal Processing Technology

- Aided with the implementation and testing of new audio decoding technologies for use with Virtual Reality
- Utilized subjective testing methods and statistical analysis to evaluate the effectiveness of different decoding techniques.

Final Year Project   **Dec 2020 - May 2021**
Nanyang Technological University
- Developed an Arduino flight controller for a novel multirotor concept and designed and 3D printed the drone components.

Enterprise, Innovation and Leadership   **Jan 2020 – May 2020**
Nanyang Technological University
- Conducted a business plan for a meal tracking app and developed a prototype mobile application.

Engineering Innovation and Design   **Jan 2019 - Apr 2019**
Nanyang Technological University
- Combined business and engineering skills to design and build a product, as well as subsequently drafting up a business plan and marketing strategy for said product.

Summer Project   **May 2018 - Jul 2018**
Nanyang Technological University, Making and Tinkering Laboratory
- Applied scientific and engineering principles to overcome various constraints to design and build the HoverFish, a lightweight remote-controlled helium balloon from scratch.
- Received the title "Best Project" out of around 15 groups.

SKILLS

Languages
- Fluent in written and spoken English and Chinese, and basic conversational Japanese.

Technical
- Experience with full stack development and deployment of web applications.
- Proficient in Python scripting with Tensorflow to train machine learning models and web development with Flask and Django.
- Experience with backend development with Java, Golang, Node.js and Python, and SQL.
- Experience with frontend development with HTML, CSS and Javascript and frameworks such as React and Flutter.
- Experience with embedded programming in C/C++.
- Experience with mobile development with Flutter and Dart, and Android development with Kotlin.
- Familiar with Linux based Operating systems and virtualization and containerization technologies like Docker.
- Experience with CI/CD with tools such as Jenkins and GitHub Actions.
- Experience in Cloud technologies such as AWS EC2, Lambda and other Webhosting services.
- Experience with DevOps tools like Terraform.
- Proficient with MATLAB and Simulink for Engineering calculations and simulation.
- Experience with ROS concepts and workflow for simulation and programming robot systems.
- Able to use Computer Aided Design software such as AutoCAD Inventor and Solidworks, as well as graphics design software like Photoshop.
- Able to use statistical analysis software such as IBM SPSS Statistics and R.
- Proficient in Microsoft Word, Excel and Powerpoint and automation with VBA.