Pan Ziyue

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Education

SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN - BACHELOR OF ENGINEERING (ENGINEERING PRODUCT DEVELOPMENT), 2026

- Computer Engineering specialisation, Double Minor in Computer Science and Digital Humanities
- GPA 4.18/5.0, SUTD Global Distinguished Scholarship Holder
- Expected Date of Graduation: April 2026

SINGAPORE POLYTECHNIC - DIPLOMA IN COMPUTER ENGINEERING, 2019

- Diploma in Computer Engineering - Silver Medalist
- GPA 3.965/4.0, Director's Honour Roll AY2016/17, AY2017/18
- Founding Vice President of SP Maker's Club

Work Experiences

COFOUNDER, FOURIERINDUSTRIES (STARTUP) | HTTPS://FOURIER.INDUSTRIES 2013 – PRESENT

Co-founded a startup company during secondary school with several of my schoolmates developing apps for the school, which later expanded to embedded hardware design for education.

- Developed in-house mobile applications for the school from 2013 to 2015
- Developed the SPEEEduino, a modular IoT-enabled AVR+ESP8266 microcontroller platform for Singapore Polytechnic, which won a tender for 500 pieces in 2017
- Developed the SSTuino (2018-2021) and SSTuino II (2022-present), an educational IoT-capable microcontroller board targeting secondary schools

INTERN, EARTH OBSERVATORY OF SINGAPORE, NANYANG TECHNOLOGICAL UNIVERSITY | 2018-2019

Interned at the Earth Observatory of Singapore in NTU for 22 weeks.

- Assisting in the consolidation and stabilisation of the Microsoft Azure port of the Hybrid Science Data System (HySDS), working in collaboration with NASA's Jet Propulsion Laboratory (JPL). HySDS is a highly scalable, hybrid cloud platform for scientific computation, with a particular focus on processing data from earth observation satellites.

INTERN, SATELLITE RESEARCH CENTRE, NANYANG TECHNOLOGICAL UNIVERSITY | 2018

Interned at the Satellite Research Centre (SaRC) in NTU for 6 weeks during the March-April semester break to gain a deeper understanding of micro/nanosatellite engineering.

- Developed the ORBITAL, a cross-platform desktop application written in Java to help highlight anomalies in satellite orbital data of the VELOX-II nanosatellite.

INTERN, BUUUK PTE. LTD. | HTTPS://BUUUK.COM – 2016

Interned at buUuk Pte. Ltd. for half a month in February of 2016 to gain more experience about professional mobile development companies in Singapore, and aided in the development of one of their client projects.

Co-curricular Activities

SECRETARY, SUTD ELECTRIC VEHICLE CLUB | 2024 - PRESENT

- Keep and maintain club records, meetings minutes and ensure correctness of paperwork
- Develop embedded electronics and software for the EV Club's flagship project, the Electric Vehicle by Additive Manufacturing (EVAM)

VICE PRESIDENT, SP MAKERS' CLUB | 2017 – 2018

- Assist the club president in designing workshops and programs for club members as well as the general public
- Provide technical guidance and advice for club members

CHIEF TECHNOLOGY OFFICER, SST INC | HTTPS://SSTINC.ORG – 2014-2015

CTO of SST INC, my secondary school's Infocomm Technology club, managing servers and educational technologies.

- Manages ICT assets of SST INC, such as virtual servers and club website
- Oversee training programs for club members
- Organise club events, such as the annual INCamp

Academic Projects

ELECTRIC VEHICLE BY ADDITIVE MANUFACTURING 1.0 (EVAM 1.0) | ELECTRONICS TEAM LEAD | 2024 - PRESENT

- Built and tested a redesigned vehicle electronics system, with the main aim of improving data transfer reliability and preventing accidental drop-out of individual nodes.
- Mentored fellow students on the team on electronics CAD design.

PROJECT MYNAH | TEAM MEMBER, AVIONICS | 2023 - PRESENT

- Built, debugged and tested commercially available amateur rocketry flight computers for use in the Friends of Amateur Rocketry competition (2023), including software and radio aspects. The Project Mynah team was awarded 3rd place in the competition.

NON-INDUSTRIAL DECOMPOSITION OF PLA PLASTICS | TEAM MEMBER | 2023

- Developed embedded RP2040 CircuitPython code for Internet-based data logging and Jupyter notebook based code for experimental data analysis. In addition, sun tracking analysis was completed using AGI Systems Tool Kit. Final report is available here.

AIRBUS-SSTA HADR CHALLENGE | TEAM MEMBER | 2018

- Winner of the 2018 Airbus-SSTA Humanitarian Aid and Disaster Relief Challenge, organised by Airbus Defence & Space in collaboration with the Singapore Space and Technology Association. Tasked with developing an Android application that increases the efficiency and effectiveness of Humanitarian Assistance and Disaster Relief operations.