# **Gao Siyu (Singapore Permanent Resident)**

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#### **EDUCATION**

### Nanyang Technological University (NTU)

Aug 2021 – Jun 2024

- Bachelor of Engineering (Electrical and Electronic Engineering)
- Honours (Merit)
- Specialization: Info-Communications Engineering (Computer Engineering)
- Relevant Modules: (1) From Computational Thinking to Programming (2) Data Structures and Algorithms
  - (3) Computer Communications (4) Intro to Data Science and Artificial Intelligence (DSAI)
  - (5) Web Application Design (6) Intelligent System Design (7) Database Systems

# **Virtual Training and Learning Development**

- (Udemy) 100 Days of Code "The Complete Python Pro Bootcamp 2022"
- (Udemy) The Complete JavaScript Course 2023: From Zero to Expert!
- (Udemy) Etherum and Solidity: The Complete Developer's Guide
- AWS online course: AWS Cloud Practitioner Essentials

# **Temasek Polytechnic (TP)**

Apr 2017 - Feb 2020

• Diploma in Biomedical Engineering; CGPA: 3.59 / 4.00

#### **PROJECTS**

#### AuChain: A dApp for Proof of Authentication of Physical Goods

Aug 2023 - May 2024

- Developed an iOS Decentralised Application (dApp) with **React Native**, utilizing blockchain technology for authenticating physical goods through QR code scans.
- Deployed Etherum smart contracts using the **Solidity** language with the **Truffle** suite, adopting the ERC721 standard for ownership management.
- Integrated the QR code feature to assign secure digital tags to physical goods, facilitating seamless product verification and ownership transfers.

# Cinema Paradiso: A web portal for booking Cinema tickets

Oct 2023 - Nov 2023

- Collaborated in a two-person team to develop a responsive web portal for cinema ticket bookings using **HTML**, **CSS**, and **Javascript**, ensuring a seamless user interface with features such as interactive seat selection and booking retrieval.
- Managed backend operation with PHP and MySQL, executing database connections and queries on XAMPP server.

### NTU DIP: Elderly Health Monitoring by an Impulse Radio UWB Radar

Jan 2023 - Apr 2023

- Collaborated in a team of six to develop a Python script to improve accuracy for processing radar data frames and detect minor movements.
- Analysed the Ultra-Wide Band (UWB) Radar's working mechanism and utilised Python's SciPy library for signal processing and integrating them with existing codebase.

# NTU DSAI Project: Machine Learning for Cardiovascular Diseases Prediction

Jan 2023 – Apr 2023

- Collaborated in a team of four to create a Python-based Machine Learning classifier aimed at predicting cardiovascular diseases. Conducted comprehensive data analysis and visualisation, and assessed algorithms such as Logistic Regression and Random Forest for model training.
- Developed a user-friendly interface using Tkinter for the display of predictive outcomes.

### **WORK EXPERIENCE**

### Infineon Technologies Asia Pacific, <u>IoT/Embedded systems Intern</u>

July 2022 – Dec 2022

- Contributed to an IoT development project by programming a System-on-Chip (SoC) IoT sensor kit using C language, which was interfaced with a Raspberry Pi via MQTT protocols, leveraging Eclipse Mosquitto as the communication broker to transmit sensor information.
- Presented the IoT sensor kit at a corporate showcase, explaining the product's features and applications, and demonstrating its functionalities to attendees.
- Configured and deployed a 60GHz radar module for occupancy tracking and area segmentation tasks, thereby integrating it with **AWS IoT Core** via MQTT protocol.

# Uniqlo Pte Ltd, *Retail Associate* (Part-Time)

Sep 2017 – Aug 2021

- Provided high-quality customer service with customers' needs fulfilment (e.g., assisting customers with product selection / purchasing, sharing product and services information).
- Displayed merchandise on mannequins to appeal potential customers about new arrivals and popular products thereby maximizing sales.
- Carried out ad-hoc duties (e.g., phone calling to customers, transferred products, changed product layout)

### **SKILLS**

- Programming Languages: C, MATLAB, Python, JavaScript, mySQL, HTML5, CSS, PHP, Solidity
- Developer Tools: Linux, Git, AWS, Docker, Node.js, Truffle, Ganache, React Native
- Application and software skills: MPLAB, Microsoft Office, LabView, Blockchain, Agile Development, JIRA