### EDUCATION

### Nanyang Technological University, Singapore Bachelor of Engineering and Social Sciences

- B.Eng. (Honors) in Electrical & Electronic Engineering
- B.Soc.Sci. (Honors) in Economics
- Minor in Mathematics
- Expected Honours (Highest Distinction), Current CGPA: 4.52/5.00
- Relevant Coursework: Data Structure & Algorithms, Machine Learning, Deep Learning, Time Series Analysis, Digital Signal Processing, Computer Network, Financial Markets, Economics

### ACADEMIC PROJECT

#### Nanyang Technological University, Singapore Course Project – Multi-Class Prediction of Obesity Risk

- Applied Principal Component Analysis (PCA) to reduce dimensionality while preserving key variance, improving model efficiency on a small dataset.
- Leveraged Feature Engineering techniques such as SHAP (Shapely Addictive Explanation) and Mutual Information to identify the most influential predictors.
- Developed a cross-validation framework to evaluate models effectively despite the small sample size, leading to the selection of a LightGBM Classifier, which achieved the highest accuracy.

### **INTERNSHIP EXPERIENCE**

### **Epson Singapore Pte Ltd**

## Pre-Sales Department, Intern

- Worked closely with 3 reginal senior engineers from Epson Indonesia to improve and optimise operations of the HR Management System by 50%
- Developed a customer-focused design and printing solution through multiple iterations. Initially created a demo utilising React, Tailwind CSS, and Flask.
- Enhanced application by integrating Gen AI for content generation and subsequently incorporated Canva Connect API for seamless design integration, ensuring a convenient and efficient user experience.

### **RESEARCH EXPERIENCE**

# Babylinc Lab, Early Mental Potential & Wellbeing Research Centre, NTU Part-Time Student Assistant

- Conduct experimental testing and data collection for studies on mother-infant interactions.
- Perform behavioural coding of maternal and infant social behaviours.
- Assist in data processing and statistical analysis using MATLAB and R.

# **CO-CURRICULAR ACTIVITIES**

### NTU NiCE Hack 2024

# Main Committee (Training)

- Collected traces from Arduino board using oscilloscope and set challenges for over 200 participants.
- Learned from research scientists about side channel attacks and AES encryption and helped to conduct workshop and give speech to around 100 pre-university students.

### NTU Lunar New Year Celebration Live 2024

### Main Committee (Logistics)

- Managed end-to-end process of renting venues and coordinating logistics.
- Spearheaded cleanup operations post-events with meticulous aftercare services provisioning.
- Collaborated with other committees to execute events flawlessly.

# SKILLS

Languages: Proficient in English and Chinese Programming Languages: Python, JavaScript, C++, R, MATLAB Machine Learning & Al: PyTorch, OpenCV, Scikit-learn, Numpy

# **HOBBIES & INTERESTS**

Apr 2024 – Oct 2024

Feb 2025 - Present

Feb 2024 – Mar 2024

May 2024 – Aug 2024

Oct 2023 - Feb 2024

Aug 2023 – May 2027