

EDUCATION

Nanyang Technological University, Singapore Bachelor of Engineering (Chemical and Biomolecular Engineering), Specialization in Machine Learning & Data Analytics	Aug 2022 – Present
<ul style="list-style-type: none">• Expected Honors (Higher Distinction)• Relevant Courses: Machine Learning, Data Analytics, Thermodynamics, Reaction Engineering, Plant Safety	

EXPERIENCE

Keppel, Real Estate Division Technical Services Specialist, Intern	June 2025 – Aug 2025
<ul style="list-style-type: none">• Rebuilt cost databases using SQLite/MySQL with relational models.• Developed TypeScript floor plan generator producing top 10 optimized layouts; added AutoCAD DXF export.• Applied Python Library (NumPy, PyTorch) linear regression for cost prediction (90% accuracy).• Automated PDF data extraction with Power Apps AI Builder + Python.	
Skyworks Solutions Inc. Quality Management Specialist, Intern	Dec 2024 – May 2025
<ul style="list-style-type: none">• Automated scrap case reviews via Power Automate/Apps, achieving 95% closure rate.• Built Power BI dashboards with text analytics to detect 100 hidden mishandling cases, reducing losses by \$300K.• Created Python + Azure PPT parser to extract key event data from reports/emails.• Optimized internal workflows with US IT team, cutting error rate 15% and report time 20%.	

ACADEMIC PROJECT

Undergraduate Research Experience on Campus (URECA) Project Optimization of 3D SU-8 Microstructures using Mask-less Lithography: Part 1 – Multi-layered structures	Sep 2023 – June 2024
<ul style="list-style-type: none">• Reduced microstructure size to 27 µm and print time by 30% via automation.• Improved wafer fabrication efficiency 20%; enhanced imaging resolution 4× with SEM + oil immersion.	

Institute of Engineering, Malaysia AVEVA Software Simulation Competition - MTH hydrogen storage system	Jan 2025 – Present
<ul style="list-style-type: none">• Lead team to design a 30% ROI hydrogen storage system with AVEVA simulations + manual calculations.• Integrated PV cells to achieve 20% green / 80% blue hydrogen with carbon storage.	

CO-CURRICULAR ACTIVITIES

American Institute of Chemical Engineers, NTU Student Chapter President	Sep 2024 – Present
<ul style="list-style-type: none">• Founded official NTU chapter, fostering professional development and industry connections.• Organized industry workshops and networking events to enhance technical skills.• Planned sustainability-driven hydrogen-fuel E-car competition using iodine-clock reaction.	

Analytics and Data Science Club, School of Chemistry, Chemical Engineering and Biotechnology Vice-President	Sep 2025 - Present
<ul style="list-style-type: none">• Analysing semiconductor, chemical, and biomedical datasets on Kaggle using Python, SQL, and MATLAB, building predictive models, and showcasing insights through winter/summer projects open to students.• Conducting machine learning experiments on diverse datasets (semiconductor, chemical, biomedical) and sharing results in student-accessible workshops and seasonal showcases.	

College of Engineering NTU One Arena 2024 - Head Programmer	Oct 2023 – June 2024
<ul style="list-style-type: none">• Led 15-member team, developed robot use tutorials, and resolved technical issues for 130 participants from 24 schools.• Built Python-coded robotic maze and competition schedule, reducing event transitions by 3 minutes.	

Chinese Society Chinese Cultural Camp - Event Chairperson	Sep 2023 – June 2024
<ul style="list-style-type: none">• Managed a committee team of 30 members, ensuring efforts remained organized and coordinated.• Oversaw budget planning, cutting down initial budget by \$3000 while assuring cultural promotion objectives are met.• Devised an alternative activities format to ensure event continuity during participant shortages, preventing event cancellation.	

Association of Malaysian Chinese Independent School Alumni (AMCISA) Freshman Orientation Activities – Programmer	Aug 2023 – Aug 2024
<ul style="list-style-type: none">• Planned and executed interactive games and activities using JavaScript and Google Apps Script, with integrated Google Sheets formulas for real-time tracking and record-keeping.• Coordinated with different portfolios to ensure smooth procedures and seamless execution of events.	

SKILL

Languages	: Proficient in English, Chinese and Malay, conversant in Spanish
Digital Skills	: MATLAB, Python, Excel, Arduino, Jupyter Notebook, Rising View, Power BI, Microsoft Power Platform, SQL, DAX/M language, JavaScript, Google Apps Script,.NET, React, Java, C, AVEVA, Aspen HYSYS, DWSIM
Lab Skills	: Wafer Fabrication, SEM Microcopy, Chemicals and Heat Management

AWARDS & ACHIEVEMENT

Scholarship Award	: Kuok Foundation Scholarship Recipient.
	: IMONST (International Mathematical Olympiad National Selection Test), Bronze Award – 2018 IChONST (International Chemistry Olympiad National Selection Test), Honourable Mention – 2018