

EDUCATION

Nanyang Technological University (NTU)

Aug 2022 – **May 2025** (Expected)

School of Electrical and Electronic Engineering

- **Bachelor of Engineering (Information Engineering and Media)(IEM)**

- **Honours** (Expected)

- **Relevant Modules:** (1) *From Computational Thinking to Programming [C Language]* (2) *Software Engineering* (3) *Object Oriented Programming [Java]* (4) *Introduction to Data Science and Artificial Intelligence [Python]* (5) *Data Structure and Algorithms [C Language]* (6) *Artificial Intelligence & Data Mining* (7) *Web Application Design*

Singapore Polytechnic (SP)

Apr 2017 – Mar 2020

School of Electrical of Electronic Engineering

- **Diploma in Computer Engineering (DCPE)**

- **GPA: 3.72**

- **Relevant Modules:** (1) *Client Server Application Development [HTML, PHP, SQL]* (2) *Mobile Application Development [Android, Java]* (3) *Structured Programming [C++]* (4) *Data Structures & Algorithms [C++]* (5) *Object Oriented Programming [Java]*

WORKING / INTERNSHIP EXPERIENCE

ST Engineering, *DevOps Intern*

May 2024 – Jul 2024

- Implemented DevOps best practices to enhance collaboration between development and operations teams, streamlining workflows and promoting cross-functional teamwork.
- Optimized existing automation processes using Terraform to improve reliability and performance, conducting assessments and refining workflows to minimize inefficiencies.
- Designed and implemented CI/CD pipelines to automate software delivery, reducing turnaround time and accelerating the release cycle, while ensuring safe and reliable deployments

Accenture, *Business Analyst*

Mar 2020 - Jun 2020

- Applied RPA techniques to automate software testing protocols, ensuring rigorous compliance verification while streamlining operational workflows for enhanced efficiency and accuracy.
- Leveraged robust data analysis techniques to identify inefficiencies and streamline processes, resulting in significant time and resource savings.

Accenture, *Test Analyst Intern*

Sep 2019 – Feb 2020

- Utilised RPA to automate testing processes of a government client's computer system.
- Drove improvements in system reliability and operational efficiency through the implementation of automation solutions.

SKILLS

- **Programming Languages:** Java, C, C++, C#, Python, JavaScript, Dart, Bash, Shell, TF, HTML, CSS, PHP, SQL, YML
- **Software Applications:** Visual Studio Code, Android Studio, Xcode, Zoom, Microsoft Office, Adobe Creative Cloud, Unity, Figma, Canva, Eclipse, AutoCAD, Jupyter Notebook, Autodesk Inventor
- **Technical Skills:** Data Structures and Algorithms, Object-Oriented Programming, Machine Learning and Artificial Intelligence, Databases, Automation, Version Control, Front-End, Back-End, DevOps, CI/CD, UI/UX
- **Tools / Frameworks / Libraries:** React, Flutter, Firebase, React.js, Restful APIs, Apache Tomcat, NetBeans, Git, GitHub, GitLab, TensorFlow, Pandas, Numpy, Terraform, Microsoft Azure, Amazon Web Services
- **Operating Systems Environment:** Windows, MacOS, Linux (Ubuntu)
- **Languages:** English, Malay
- **Soft Skills:** Communication, Adaptability, Teamwork, Problem Solving, Analytical Thinking

ACADEMIC PROJECTS / MODULE PROJECTS

NTU-IEM Module: Final Year Project

Aug 2024 – **Present**

Module Project: ***Fourier Forge: Development of flutter apps for Fourier series*** (Individual)

- Developed mobile applications for smart devices to solve Fourier series exam questions, incorporating step-by-step solutions, using the Flutter Framework.
- Reviewed existing mobile apps designed for solving exam questions to gain insights into the current landscape of question-solving applications.
- Mastered additional mobile application skills and best practises, including version control systems and documentation.
- Utilised knowledge from IEM design modules such as UI/UX design and colour theory for the design of the app.

NTU-IEM Module: Web Application Design

Aug 2024 – Nov 2024

Module Project: **Opus-Cinemas** (Team of 2)

- Developed a premium movie booking web application using XAMPP, HTML5, CSS3, JavaScript, PHP, and SQL, featuring real-time seat selection and secure payment processing with multiple options.
- Designed comprehensive film browsing functionality with detailed listings, trailers, and personalized recommendation system based on user preferences and viewing history.
- Implemented user account management allowing customers to track booking history, manage reservations, and receive automated email invoices with integrated customer support features.

NTU-IEM Module: Artificial Intelligence and Data Mining

Oct 2024 – Nov 2024

Module Project: **Dogs vs Cats Classification** (Team of 3)

- Developed and implemented multiple deep learning models including VGG16, ResNet, and GoogLeNet to classify images of dogs and cats, achieving highest accuracy of 99.75% with GoogLeNet architecture.
- Implemented **data preprocessing techniques** including image resizing, normalization, and augmentation to improve model performance and training stability.

NTU-IEM Module: Design and Innovation Project

Aug 2023 – Nov 2023

Module Project: **JamStream** (Team of 9)

- Designed and developed a Music Streaming Mobile Application similar to Spotify, with added social functionalities including interactive chatrooms with the goal of increasing user engagement and satisfaction.
- Integrated Front-End JavaScript Programming with the React Framework for the UI/UX of chatting features, as well as Spotify's Developer API.
- Utilised Google's Firebase for the Back-End cloud computing service for the storage of messages and chatlogs.

NTU-IEM Module: Introduction to Data Science and Artificial Intelligence

Aug 2023 – Nov 2023

Module Project: **Prediction for Cardiovascular Disease** (Team of 4)

- Explored and analyzed large datasets from Kaggle.
- Employed Python Programming with 3 Machine Learning Models (i.e., Decision Tree, Random Forest, Logistic Regression) to predict tendency of patients suffering cardiovascular disease.
- Concluded Random Forest was ideal ML Model 70% prediction accuracy which was significantly correlated with critical health parameters (e.g., Smoking, Cholesterol, Gender, Age, Exercising).

NTU-IEM Module: Introduction to Design & Project (Team of 2)

Jan 2023 – Apr 2023

• Project 1 (Escape):

- Used C# Programming to design, code and develop a 3D Escape Room game.
- Implemented assets and animations within the Unity environment.

• Project 2 (OldEgg):

- Created a web-based application for establishing an e-commerce platform specializing in the sale of computer parts using Apache Tomcat and Java Servlet Programming.
- Utilized back-end programming to manage databases using MySQL.

• Project 3 (Bahoot!):

- Employed Java Programming (Android Studio) to a mobile application resembling Kahoot!
- Deployed React.js with MySQL and RESTFUL APIs to construct a web-app for Bahoot!

NTU-IEM Module: Object-Oriented Programming

Jan 2023 – Apr 2023

Module Project: **Minesweeper Game** (Team of 2)

- Applied Java Programming to build a Minesweeper Game with unique features (e.g., Difficulties, Sound, Custom Textures, Exporting of Scores) using Object-Oriented Programming.
- Acquired proficiency in translating rules and game mechanics into executable software code.

CO-CURRICULAR ACTIVITIES

NTU Escendo 2025, Vice President (Branding and Marketing)

Aug 2024 - Present

- Led the design of various collaterals, including Instagram posts, posters, videos and merchandise.
- Manage the event's social media channels to effectively promote initiatives and develop reliable communication channels to ensure seamless event coordination.

NTU Garage@EEE, Branding and Marketing Subcommittee Member

Aug 2024 - Present

- Contributed to the design of a range of collaterals, including Instagram posts and posters.
- Utilized photography skills to capture unforgettable moments at various Garage@EEE events.

NTU Enitio 2024, Branding and Marketing Subcommittee Member

Jan 2024 - Aug 2024

- Assisted in the dry run of the orientation camp and offered feedback on the camp activities.
- Utilized photography skills to capture memorable moments during the orientation camp.

NTU Muslim Society (NTUMS), Marketing Subcommittee Member

Sep 2023 – Aug 2024

- Served as a photographer for various NTUMS events such as Photography Workshops.
- Assisted in the Branding and collaterals such as social media posts and merchandise of NTUMS