Yap Oi Long, Marcel (Singaporean) Mobile Phone: (+65) 9777 4671 | Email: marcelyap31@gmail.com https://marcelvap.dev Part-time Availability: Aug 2023 – Dec 2023

EDUCATION

Nanyang Technological University (NTU)

School of Electrical and Electronic Engineering

- Bachelor of Engineering (Information Engineering and Media)
- Honours (Merit) (Expected)

• Relevant Modules: (1) Data Structures and Algorithms (2) From Computational Thinking to Programming (3) Object Oriented Programming (4) Introduction to Data Science and Artificial Intelligence (5) Software Engineering

WORK EXPERIENCE

PenguinSmart Inc. (Taiwan), Full Stack Developer

- Designed new interfaces for the company's webapp, connecting them with the backend to display dynamic data using React and GraphOL
- Redesigned and implemented improvements to the user interface and user flow of the website using Figma and React

ACADEMIC & MODULE PROJECTS / PERSONAL PROJECT ACCOMPLISHMENT

NTU-IEM Module: Interface Design

Module Project: Revamp of Internship Finding Platform, InPlace (Team of 5 Members)

• Led my team to conduct user research and gathered feedback on the problems of the current interface.

• Applied research and skills learnt such as information architecture and visual design basics to create a brand new, more user-friendly interface.

Summer Exchange Module: Business Communications and Social Media Edinburgh Summer School

- Learned how to utilize social media to maximise exposure of a company or product to target audience.
- Experienced a vastly different work and study environment.

NTU-IEM Module: Introduction Project and Desian Module Project 1: *E-Shop Website Development* (Team of 2 Members)

• Utilized <u>3 software programming</u> (i.e. **HTML**, **CSS**, **SQL**) to design and develop E-Shop Website with features (e.g. Item Search, Contact Page, Product & Services, Cart) for enabling online consumers to purchase items (e.g. Pokemon)

Module Project 2: *Racing Game Design* (Team of 2 Members) Jan 2022 – Apr 2022

- Successfully applied C# Programming (Unity) to design and create Racing Game with 3 AI-controlled traffic systems and randomized vehicle spawning around the map.
- Optimized system resources usage by thorough debugging to increase framerate of game by 100-fold with multiple **C# Scripts**.

NTU-IEM Module: Introduction to Data Science and Artificial Intelligence Module Project: *Prediction of Car Accident for Avoidance* (Team of 5 Members)

• Successfully applied **Python Programming** to train 3 Machine Learning Models (i.e. Linear Regression. Decision Tress, Random Forest) for predicting car accident for avoidance based on given Kaggle Dataset.

Aug 2022 – Nov 2022

Jul 2022 – Aug 2022

Jan 2022 – Apr 2022

Aug 2021 – Nov 2021

Aug 2020 - Jun 2024 (Expected)

Jan 2023 – July 2023

• Concluded the Random Forest was ideal model with 78% prediction accuracy which was significantly correlated with crucial factors (e.g. Weather, Time/Day)

Self-Driven Project: Analysis of Course Registration

• Applied **Python Programming** to model dates and timings of NTU's course registration exercise for personal analysis.

NTU-IEM Module: **Object-Oriented Programming** Module Project: Design and Development of Minesweeper Game (Team of 2 Members)

 Successfully deployed JavaScript to implement software code for fully functional "Minesweeper Game" · Designed retro-style graphics for game interface to hone user experience

NTU-IEM Module: Basic Media Writing

Module Project: *Website Design* (Team of 5 Members) • Designed website through online software "Wix" to attract customers to purchase cleaning service.

LEADERSHIP / CO-CURRICULAR ACTIVITIES

NTU-EEE Club, *Director* (Student Development)

- Collate feedback from students pertaining to course curriculum upon modules completion.
- Compile essential supporting materials for students' reference prior examination

NTU-Hall 5, *Director* (Quintsical Productions)

- Assumed role as **In-Charge** of writing script for live stage performance.
- Led 10 team members during production phase to prepare performance.
- · Handled logistics and acquisitions of costumes for cast members.

NTU-EEE Efinity, *Publicity Committee Member* (Freshman Orientation 2022) Dec 2021 – Aug 2022

- Produced engagement through video compilation of EEE seniors playing games using Da Vinci Resolve
- Created publicity materials (e.g. Videos & Instagram posting) to promote Freshman Orientation Camp 2022.

NTU EEE Efinity, Group Leader (Freshman Orientation Camp 2021)

- Led group of freshmen through 3-Day Virtual Orientation Camp with games and talks facilitation.
- Clarified doubts from freshmen about NTU or EEE/IEM degree program

SKILLS / HOBBIES

- Languages: Proficient in English, Chinese (Mandarin) and Malay
- Software Programming: Typescript, GraphQL, Ruby on Rails, React, Python, Visual Basic, C++ / C# / C Language, Java, HTML, CSS, Javascript Assembly Language
- **Software Applications**: Figma, Wix, Unity, Visual Studio, Wondershare Filmora, Aesprite, Da Vinci Resolve, Jupyter Notebook, Adobe Suite (Illustrator, XD), Microsoft Office 2022, Autodesk Inventor Professional 2020, CircleCI, Netlify
- License: Class 3A Driving License
- Hobbies: Cooking, Playing Musical Instruments (Piano), Sports (Badminton, Swimming), Gaming

Web Projects Portfolio: https://marcelyap.dev

Design Portfolio: https://drive.google.com/drive/folders/1tG2tylKMUHTqocX96Qf1K0Xft4CUv9c?usp=sharing

Github: https://github.com/GnawedLeaf

Aug 2021

Jan 2021 – Apr 2021

Jan 2021 – Apr 2021

Aug 2021 – Present

Aug 2021 – March 2022

Aug 2021