

CAREER OBJECTIVE

Megan Liow Song Ting is a highly self-motivated individual with a passion in the IT-related field. She is interested in contributing her analytical skills and creative perspective in a software development role.

EDUCATION

Nanyang Technological University (NTU) Jul 2019 – **Jun 2023** (Expected)
School of Electrical and Electronic Engineering
• **Bachelor of Engineering (Information Engineering and Media)**
• **Honours (Distinction)** (Expected); current CGPA: 4.17 / 5.00

ACADEMIC PROJECTS / MODULE PROJECTS

NTU-IEM Final-Year Project: ***The Art of Stitching*** Aug 2022 – **Aug 2022**
• Develop a hand stitching specific cross-platform mobile application using the **MERN** stack and **React Native** for users to learn the essential types of stitching techniques and interact with others online.

NTU-IEM Module: ***Web Application Design*** Aug 2022 – **Aug 2022**
• Utilise **HTML, CSS & Javascript** for frontend, and **PHP & MySQL** for backend, to create a web portal from scratch.

NTU-IEM Module: ***Web Design & Technologies*** Aug 2022 – **Aug 2022**
• Use **Adobe Photoshop** to design **Single-Page Application**.
• Utilise **HTML, CSS & Javascript** to create a frontend web application.

NTU-IEM Module: ***Software Engineering*** Jan 2021 - Apr 2021
• Research essay on **Amazon Web Services (AWS)**, especially on concurrency & continuous evolution services such as **AWS Elastic Beanstalk, Lambda and CodePipeline**, on how they are able to help e-commerce.
• Researched on **Black Box & White Box testing**.

NTU-IEM Module: ***Introduction to Design and Project*** Jan 2021 – Apr 2021
NTU Module Project: ***System Design & E-Commerce Website Development*** (Individual)

• **IT Project 1:** Deploy **Java Programming** of Android Studio to develop to create a trivia quiz for students and store feedback, choice, and Login/Sign Up Authentication responses in **FireBase & MySQL**.
• Utilised **Javascript** to showcase interactive graphs that reflect all the answers that students choose.
• Utilised **HTML, CSS & Javascript** to create a accordion menu.

• **IT Project 2:** Utilised **C# Programming** with **Unity** engine functions and features to create *point-system game* akin to popular 'Temple Run' game system.
• Built 3D Game Objects such as spinning coins, wall barriers and road.
• Used machine learning and implemented triggers to agents for smooth gameplay.

• **IT Project 3:** Utilised 4 software programming (i.e. **HTML, CSS, MySQL, Java**) to design and develop E-commerce website for client and server.
• Utilised **MySQL** to store databases on customers' username, password, orders, etc.
• Used **HTML and CSS** to create registration, home, and order pages.

NTU-IEM Module: ***Introduction to Data Science and Artificial Intelligence*** Aug 2020 - Dec 2020
NTU Module Project: ***Factors Impacting Movie Rating*** (Team of 3 Members)

• Utilised **Eclipse** to code **Python Programming** pertaining to influencing variables on movie ratings; found through **K-neighbour Regression** that crew and cast were most significant factors at 90% accuracy.
• Cleaned CSV data in file for data preparation, whereby rating of movie has to be greater than 0.0, and movie has at least one of the following features: cast, crew, production companies.
• For categorical data, converted pandas data frame column of lists to strings.
• Used mat plot library to plot graphs and pie chart to represent data.
• Performed exploratory data analysis.
• Split data into training and testing sets.
• Used Train regression-based model using various Regressor methods:

- Bayesian Ridge Regression
- Linear Regression
- K-Neighbour Regression
- Ridge Regression

• Make predictions and evaluate using R² score.

NTU-IEM Module: ***Computer Communications*** Aug 2020 - Dec 2020

- To study the principle of spanning-tree protocol using 2 PCs and 24-port Catalyst switch 2950.
- To study the characteristics of LAN switches in presence of spanning tree protocol.

NTU-IEM Module: **User Interface Design**

Aug 2020 - Dec 2020

NTU Module Project: **Find-My-Spot** (Team of 5 Members)

- Designed and animated user interfaces using **Figma** for software application that helped students to find empty seats within school campus.

DSTA: **Cyber Defenders Discovery Camp (CDDC)** (Team of 4)

June 2020 - July 2020

- Utilised cybersecurity techniques such as decryption tools, **Python, Linux & Postman** during 48-hour Capture-The-Flag competition.

INTERNSHIP EXPERIENCE

Thales DIS Pte Ltd, Software Developer Intern

Jan 2022 – May 2022

- Recreated current risk assessment tool to a web-based application using **Electron**.
- Re-designed the tool using **HTML, CSS, & Javascript**, to a measured level of trust checklist form to provide graphical representations of security level calculations of respective products based on user selection.
- Utilised **JQuery** for frontend user interface.
- Implemented **Object-Oriented Programming** for risk assets.
- Validated and parsed XML to JSON using **xmli-js**, and validated backend JSON data using **Ajv**.
- Conducted unit testing for JSON validation using **Jest**.
- Created documentation with **JSDoc**.

ST Engineering, Software Developer Intern

May 2021 – July 2021

- Involved in **Agile** software development cycle (**SCRUM**) and worked closely with development team.
- Developed one of the main features on **Eclipse** using **Java & JavaFX** with **Object-Oriented Programming**.
- Developed back-end system for feature using **MySQL**.
- Utilised **JPA** interface and **Hibernate** framework.
- Conducted **White Box testing** and documented test cases of feature to evaluate the capability of the software and met clients' expectations.
- Conducted software analysis, programming, code review, unit testing and debugging.

Ode to Art Pte Ltd, Digital Marketing Intern

Jan 2019 – Apr 2019

- Increased engagement of company's social media resulting 10% increasing of awareness.
- Re-designed architect Edmund Ng's portfolio website using **WordPress, HTML & CSS**.
- Assumed role in **Organising Committee** in collaborative dinner event with Rolls-Royce CEO.

WORK EXPERIENCE

Graphic Designer (Freelancer)

Mar 2021 – June 2021

- **Lead** in logo designing for *NTU School of Biological Sciences Club* using **Adobe Illustrator**
- Learned to be resourceful and being sensitive towards clients' needs

Innovation Challenge, Technical Support Member (Work-Study Scheme)

Dec 2019 – Dec 2019

- **Led** in game and camp activity planning for 100 college and polytechnic students thereby encouraging social interaction to increase team bonding
- Spearheaded 5 teams of 20 members to develop robot cars using **Arduino Programming** in challenge

LEADERSHIP / CO-CURRICULAR ACTIVITY

NTU Nanyang Arts Ensemble Club, Student Advisor

Aug 2021 – May 2022

- Mentored both the main committee and subcommittee teams to assist in the club's activities

NTU Nanyang Arts Ensemble Club, President

Jul 2020 – Aug 2021

- Lead 10 team members to deliver timely publicity materials and organise live chats for *Virtual Welcome Week 2020* ; successfully achieved 48% potential membership in 1st semester.
- Established 3 subcommittee teams to support in club activity planning, organising and executing.
- Conducted 10 Art & Craft Workshops to inspire 20 participants with appreciation.
- Renewed the club's constitution for the *next 5 years*

Certifications

- Coursera 2020 Certification: Web Design.
- Brain Hack 2020 Certification: Participation

SKILLS / HOBBIES

- **Software Programming:** HTML5, CSS, Bootstrap, JavaScript, Electron, ReactJS, ReactNative, MongoDB, Java, MySQL, C, C# Language, Python, MATLAB
- **Software Applications:** Figma, Adobe Photoshop, Adobe Illustrator, Adobe Premiere Pro, Microsoft suite, Unity
- **Hobbies:** Digital Drawing, Arts & Crafts, Nature Walks, Running, Playing Badminton