

INTERNSHIP OBJECTIVE

Rui Jie is searching for **10-week summer internship** related Software Engineering (e.g. Front-end Web Developer, Full Stack Engineer) and UI / UX Design. Being a self-motivated and self-determined individual to excel in every assigned task, he always seeks opportunities to learn extra skills outside of school curriculum. He is keen to offer creativity and technical skills with contribution to web / mobile application development fields.

SKILLS

- **Programming Languages:** Java, Javascript, C/C#/C++, Python, ARM Assembly Language
 - **Front End Development:** Angular, TypeScript, Bootstrap, jQuery, HTML, XML, CSS
 - **Back End Development:** NodeJS, ExpressJS, MongoDB, MySQL, Git / GitHub / Bitbucket
- **Software Applications:** Android Studio, Adobe XD, Adobe Photoshop, Adobe Illustrator, Microsoft Visual Studio Code, Eclipse, Sublime Text, Autodesk (CAD, Inventor), Minitab, Unity, Microsoft Office
- Certificates:** *The Web Developer Bootcamp Course* (Udemy), *Introduction to HTML5* (Coursera)

EDUCATION

Nanyang Technological University (NTU) Aug 2019 – Jun 2022 (Expected)

School of Electrical and Electronic Engineering

- **Bachelor of Engineering (Information Engineering and Media)**
- **Honours (Highest Distinction)** (Expected); Current CGPA: 4.51 / 5.00
- Relevant Modules: (1) *Object-Oriented Programming* (2) *Data Structures and Algorithms* (3) *Design and Innovation Project* (4) *Software Engineering* (5) *Interface Design*

Singapore Polytechnic (SP)

Apr 2016 – May 2019

School of Mechanical and Aeronautical Engineering

- **Diploma (Merit) in Bioengineering;** CGPA: 3.93 / 4.00
- **Silver Medallist Awardee** (Institute of Materials East Asia)
- Relevant Module: (1) *Computer Programming* (2) *Social Innovation Project*

ACADEMIC PROJECTS / MODULE PROJECTS

NTU Module: **Design and Innovation Project** (Team of 11)

Module Project: **Study Bee** (*Android Application for online study groups*) Feb 2020 – Mar 2020

- Developed an android application from scratch to facilitate online group meetings using *Zoom API*
- Developed high-fidelity prototypes using *Adobe XD* and *Figma* to visualise user flows and interactions
- Led the overall UI and front-end development of the project using *XML* and *Java* in actual application and implemented features like fragments, adapters and motion layouts
- Dynamically retrieves users' data using *MySQL* and *PHP*

NTU Module: **Introduction to Design and Project** (With partner)

Module Project: **Web Programming** Feb 2020 – Mar 2020

- Established "e-shop" demo with features (e.g. data handling, files uploading) using HTTP Server (Apache Tomcat Server) and relational database (i.e. *MySQL*)
- Designed and built webpage by coding front-end program using *HTML*, *CSS*, *jQuery* and *Bootstrap* frameworks
- Developed back-end logic and CRUD operations using *Java Servlet*

Module Project: **Game Programming** (With partner)

Jan 2020 – Feb 2020

- Designed and developed Role-Playing Game with storyline and complex environment using Unity 3D with *C# Programming*
- Designed graphics using *Adobe Photoshop* for textures and UI elements
- Utilized built-in features and free assets in *Unity Engine* with integration of AI for game agents

NTU Module: **Introduction to Data Science and Artificial Intelligence**

Oct 2019 – Nov 2019

Module Project: **NYPD Criminal Data Analysis and Prediction** (With partner)

- Performed statistics and exploratory data visualisation for available dataset through *Python Programming*

- Implemented *Machine Learning Models* (i.e. Decision Tree, Random Forest Classifier, K-Nearest Neighbour) using Scikit and H2O libraries to analyse results for comparison with > 61% accuracy

SP Final Year Project: ***Design and Build Economical Prototype Motorised Unit for Manual Wheelchairs*** (Team of 3) *Aug 2018 – Mar 2019*

- Designed with sketches and 3D Modelling (using *Autodesk Inventor*), fabricated, assembled, and tested prototype with appropriate engineering analysis such as *Ansys* to calculate approximation of prototype strength
- Achieved **Silver Medal** for MAE Final-Year

PROFESSIONAL INTERNSHIP

Keysight Technologies, Full Stack Software Engineering Intern

Jan 2021 – May 2021

- Developed and designed different models and parsers using *C# Programming Language* to map test plans of outdated system originally written in *BT-BASIC Language* to available infrastructure for Test Plan Optimisation
- Designed and automated over 40 unit-test cases to validate use cases of the syntaxes during interpretation
- Showcased high quality and efficiency of work and outperformed goals set in Scrum Sprints

WORK EXPERIENCE

NTU Communication and Information Library, Library Assistant (Part-Timer)

Dec 2019 – Dec 2020

- Provided library services to users at service desk inclusive data updating

Songyang Foodstuff Pte Ltd, Administrator

Jun 2019 – Jul 2019

- Executed administrative tasks (e.g. requesting for quotations, handling sales reports, system documentation, administering data integrity)

Xiang You Duo Hotpot Restaurant, Waiter (Part-Timer)

May 2018 – May 2019

- Provided customer service and being sensitive towards customers' needs

GadgetMix, Promoter (Part-Timer)

Sep 2016 – Feb 2017

- Promoted company products and services to potential customers

AWARDS AND ACHIEVEMENTS

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| • Kuok Foundation Scholarship , Kuok Foundation | 2019, 2020 |
| • Trailblazer ASEAN Scholarship , Trusted Services Pte Ltd | 2019, 2020 |
| • Silver Medallist (Institute of Materials East Asia) | 2019 |
| • Director's Honours Rolls , Singapore Polytechnic | 2017, 2018, 2019 |
| • GSK Merit Award , Singapore Polytechnic | 2017, 2018 |
| • MAE Book Prize (Engineering Mathematics II), Singapore Polytechnic | 2018 |

TRAINING & DEVELOPMENT

NTU LevelUP! Mentorship Programme

May 2019 – Aug 2019

- Delivered user research report after surveying and conducting user interviews
- Showcased web prototype using *Adobe XD* which focused on user experience, interactions, navigations and flows
- Extracted useful insights and reiterated prototype after conducting usability testing with multiple participants

LEADERSHIP / CO-CURRICULAR ACTIVITIES

NTU Mid-Autumn Festival Special Project, Main Committee (Publicity & Publication) *Sep 2019 – Sep 2020*

- Publicized event by designing logo, poster, flyer, and banner.
- Executed photo-shooting session followed by video-editing to introduce event for public's awareness through various channels (e.g. social media, flyers)
- Initiated collaboration with NTU Student Union to publicize event on Instagram to outreach large audience

EEE LEAD, Member

Aug 2019 – Present

NTU Harmonix, Member

Aug 2019 – Jan 2020