

## Rao Yuchen

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**Full-Time Job Availability: Aug 2022 onwards**

### CAREER OBJECTIVE

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Rao Yuchen is searching for a full-time graduate job. He is self-motivated with passion in Software Engineer role (Backend, Frontend). As a fast learner, he is able to move quickly, catch up necessary knowledge, proactive in communicating with stakeholders and create unique value for the team.

### EDUCATION

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**Nanyang Technological University (NTU)** *Aug 2018 – **Jun 2022** (Expected)*

**School of Electrical and Electronic Engineering)**

- **Bachelor of Engineering (Electrical and Electronic Engineering)**
- **Honours (Highest Distinction)** (Expected); current CGPA: 4.59 / 5.00
- **NTU Science and Engineering Scholarship**
- **Relevant Modules:** (1) *Software Engineering* (2) [\*Web Application Design\*](#) (3) *Information Security* (4) *Artificial Intelligence and Data Mining*

**Exchange Programme, University of Strathclyde, Glasgow**

*Jan 2020 – Jun 2020*

**Summer School, Korea University**

*Jun 2019 – Aug 2019*

### INTERNSHIP

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**Autodesk Asia Pte Ltd, Software Engineer Intern (Identity & Access Management)** *Jan 2021 – Present*

- Partner with engineers in developing and optimizing identity processes on current web products
- Undertake feasibility research on introducing better security on both front-end and back-end
- Expose on the identity workflow of real-world product and decision-making in Agile process

Internship Project 1: ***AWS secret manager Integration on SSOAdmin Application***

- Migrated the local secrets to cloud (AWS) on an enterprise SSO application (.NET)
- Executed implementation in 2 testing phases (i.e., web portal test, system integration test) and re-designed the related functional tests; Improved the code security and optimize the codebase and profile workflow

Internship Project 2: ***Security Settings App Containerization and Pipeline Integration***

- Integrated the security settings web page (ReactJS) and containerized it using Docker
- Performed the optimization on Jenkins' pipeline and automated the entire process of image building and cloud migration; largely reduce the workload of developers when testing UI results

### ACADEMIC PROJECTS / MODULE PROJECT / RESEARCH EXPERIENCE

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NTU Final Year Project: ***Next-Generation Tour Guide – An AR Travel Assistant***

*Aug 2021 - Present*

- Conduct research on current AR-based products and explore the possibility to apply AR technology on a tour guide mobile app
- Understand the concept of AR and its development skills; integrate the travel information (location, attractions descriptions, etc.) and implement advanced features (landmark recognition, GPS guidance and notification, etc.)
- Expected to develop an AR-based tourist guide application through AR SDK, libraries and APIs to help travellers navigate local tourist attractions more efficiently and intuitively

NTU Design and Innovation Project:

Aug 2020 – Dec 2020

**Mobile Application for Intelligent Goal Tracking** (team of 11 members)

- Developed a mobile application (both Android and iOS platforms) using Flutter within 4 months
- Migrated database to Firebase and adopted intelligent API for automatic goal recommendation based on user's preference and activities
- Designed and Implemented advanced features such as smart sorting algorithm for goals, ML-based OCR text recognition on handwritten goal list, customizable UI, etc
- Ranked second among 8 competitors in final DIP challenge

NTU URECA (Undergraduate Research Experience on Campus)

Sep 2019 – May 2020

URECA Project: ***Security Study on Interest Flooding Attacking in Named-Data Network***

- Looked into field of Named-Data Network (i.e., a future network architecture) and reviewed the literatures related to Interest Flooding Attack
- Coded *C++* and *Python* on ubuntu ns-3 platform to conceptualize the scenario and methods
- Discussed and analysed potential of ML-based methods to solve advanced attacking scenarios

## **LEADERSHIP / CO-CURRICULAR ACTIVITIES**

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**EEE Machine Learning & Data Analytic Club, Main Committee, Technical Trainer**

Aug 2020 - Present

- Prepare and conduct workshops and training sessions for NTU students and public who are interested in machine learning fields; achieved over 160 participants in one NLP workshop
- Manage and maintain MLDA internal and open-source GitHub repositories
- Cooperated with the Project Team to design and develop posture-detecting drone
- Participated and assisted the activities (ceremony, workshops, competition) during Deep Learning Week 2020

## **SKILLS**

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- **Languages:** Fluent in English and Chinese (Mandarin)
- **Programming:** Python, C++, Java, SQL, HTML, CSS, JavaScript, PHP, Dart, MATLAB
- **Software Application:** Visual Studio, Android Studio, Adobe PS/PR/AI
- **Development Tools:** AWS, Docker, Jenkins, Git