

REN HAO

Phone Number: +65 9499 6079 | Email: e0324534@u.nus.edu

EDUCATION

National University of Singapore

Aug 2018 - Present

- Bachelor of Engineering (Computer Engineering CEG), Honors
- Current CAP: 4.16/5.0
- Expected graduation date: May 2022

WORK EXPERIENCE

SP Digital, AI Engineering Intern

Jan 2021 - Jun 2021

- Python Dashboard: Developed a Dashboard to display AI model results with Plotly Dash. The dashboard allows users to view daily anomaly reports, trace consecutive AI reductions and check summaries of notifications in preferred time scale.
- Explain AI Model: Generated Tree SHAP values of XGBoost model's predictions using XGBoost's built-in function.
- PostgreSQL Database: Constructed a database with PostgreSQL and SQLAlchemy.
- PyTorch Autoencoder: Rewrote an autoencoder model for time-series data using PyTorch.
- Pipeline: Accomplished a pipeline (simulating scikit-learn pipeline) for an ML project.

Chinese Academy of Sciences Jiaxing Opto-Electronics Institute, Intern.

May 2019 - Aug 2019

- Software Development: Created an image process software using Qt5. Users could open multiple windows to crop different photos, turn pictures into greyscale and add texts and drawings.

ACADEMIC PROJECT

Emoji Recommendation for short text messages

Sep 2020 - Dec 2020

- Machine Learning Project: In a team of 6 members, established an ML model to predict emoji base on Tweets' short text messages.
- RNN: Implemented Word2Vec + RNN model.

Gazeebo

Sep 2019 - Dec 2019

- Software Development: In a team of 5, constructed a command-line based student assist software.
- Course Planning: Implemented functions to check the prerequisites of university courses, plan modules in 8 semesters and examine whether schemes are able to attain graduation requirements.

CASE CHALLENGE COMPETITION EXPERIENCE

Orbital Program 2019,

May 2019 - Aug 2019

- Web Development: Collaborated in a team of two to develop a website named MyPal. MyPal enabled users to store, manage and visualize social networks.
- Achievement: Apollo 11 level of accomplishment (Highest level of achievement).

OTHER SKILLS

- Programming Language
 - Practised in Python.
 - Has hands-on experience with Java and C++.
- Database
 - Has hands-on experience with SQL and relational databases such as PostgreSQL.
- Machine Learning
 - Practised in Tensorflow, PyTorch and scikit-learn.
 - Has experience on Deep Learning such as DenseNet and Capsule Network.

CO-CURRICULAR ACTIVITIES (CCA)

NUS Chinese Debate Team

Sep 2018 - Present

- Won Championship in Sixth Shan Hai International Chinese Debate Tournament in 2019.
- Won Championship in Fifth Northern Malaysia Mandarin Debate Tournament in 2019.
- As the trainer in the committee (2019.5 -2020.5), organized training sessions and competitions.