

Sean Chen

New Taipei City, Taiwan | # 886-975-913-335 | @ n60512@gmail.com | [GitHub](#)

SUMMARY

- Skilled in deep learning, natural language processing and recommendation system
- Experiences in building explainable recommendation system with diverse side information

TECHNICAL SKILLS

Programming Languages: Python, C#, JAVA, PHP

Data Wrangling: MariaDB, SQL, Pandas

Machine Learning: PyTorch, BERT, Scikit-Learn, Gensim

Others: Linux, Windows, Git, Matplotlib for data visualization

ACADEMIC PROJECT

Master Thesis

Aug 2019 ~ Jun 2020

Explainable Recommendation System for Solving Review Loss

- Proposed a **review-base** recommendation system named **HANN-Plus**, a **multi-tasking hierarchical attention neural network** to model user's preference and item's preference
- HANN-Plus not only provides explanation for prediction, but also used to generate the representation of lost review for further improving the performance
- Extensive experiments on real-world datasets of Amazon illustrate that HANN-Plus outperforms the state-of-the-art rating prediction methods

Torrance Tests of Creative Thinking (TTCT)

Sep 2018 ~ Jun 2019

- Built an android application for TTCT ([Thinking App](#)), a test of creativity, originally involved simple tests of divergent thinking and other problem-solving skills
- Host MariaDB server to query and update user data daily
- Implemented machine learning for scoring of TTCT: fastText word embedding to initialize user's data, k nearest neighbors to calculate the similarity between user's data and [ConceptNet](#) from [Academia Sinica](#), and statistical methods to accumulate user scores

Navigation System with Multiple Feature

Sep 2016 ~ Jun 2018

- Proposed a path planning algorithm extended from **A-star algorithm** with real-time traffic and turning costs
- Host SQL server to query and update road speed data, crawling from Kaohsiung City Government every 5 minute
- User interface design by implementing Open Street Map API and Google Map API

EDUCATION

National Taiwan Normal University

Sep 2018 ~ July 2020

Master of Science in Computer science and Information Engineering

National Kaohsiung University of Applied Sciences

Sep 2014 ~ Jun 2018

Bachelor of Science in Computer science and Information Engineering