

Min-Hsuan Yeh

+886-970-439-308 | minhsuan.yeh@gmail.com | mhyeh.github.io

EDUCATION

National Taiwan University of Science and Technology (NTUST)

Taipei, Taiwan

B.Sc. in Computer Science and Information Engineering (CSIE)

Aug. 2016 – Jan. 2020

GPA: 3.97/4.3, Rank: 2/51, Academic Excellence Award (Fall 2017)

RESEARCH EXPERIENCE

Natural Language Processing and Sentiment Analysis Lab, Academia Sinica

Taipei, Taiwan

Research Assistant, Advisor: Dr. Lun-Wei Ku

May 2020 – Present

Lie Detection (Publications [1])

- Established data collection guidelines by re-evaluating current collection methods in terms of verbal leakage cues, a psychological theory
- Demonstrated influence of verbal leakage cues on lie detection models by measuring inter- and inner-validity

Multi-Visual Question Generation

- Designed challenging NLP task from visual storytelling (VIST) and visual question generation (VQG) datasets to generate natural, engaging questions from multiple images
- Prevented model from forgetting problem, caused model to learn knowledge from both VIST and VQG data by applying adapter-tuning framework on visual-language transformer

Graphics Animation Multimedia Edutainment (GAME) Lab, NTUST

Taipei, Taiwan

Undergraduate Research Assistant, Advisor: Prof. Wen-Kai Tai

Feb. 2017 – Jan. 2020

Mahjong AI

- Designed value-based reinforcement learning agent with Keras (model) and C++ (distributed system) to play mahjong (a traditional board game in Taiwan) with human opponents
- Developed mahjong environment with Go and JavaScript+WebGL to evaluate AI agents

Probability Simulation for Slot Game Design

- Implemented parallel computing algorithm with CUDA to reduce combinations of slot games and streamlined slot game probability simulation to 70 times faster than baselines
- Developed web-based tool with Vue.js as frontend and Node.js+SQL as backend to visualize simulation results

PUBLICATIONS

[1] **Min-Hsuan Yeh** and Lun-Wei Ku, “*Lying Through One’s Teeth: A Study on Verbal Leakage Cues*,” in Proceedings of The 2021 Conference on Empirical Methods in Natural Language Processing (EMNLP 2021) [pdf]

[2] **Min-Hsuan Yeh**, Shih-Han Chan, Tsai-Lun Yang, Ting-Hao Huang, and Lun-Wei Ku “*Learning to Generate Natural Questions Over Multiple Images*”, submitted to the 60th Annual Meeting of the Association for Computational Linguistics (ACL 2022), Under Review

PROJECTS AT NTUST

Fast-MVS

Jan. 2019 – Jan. 2020

Graduation project to streamline process of 3D model reconstruction from video

- Implemented algorithm that combines simultaneous localization And mapping (SLAM) and multi view stereo (MVS) to construct 3D models from videos 3 times faster than baselines
- Developed tool with Node.js and Vue.js+WebGL to view and edit 3D scene reconstructions
- Designed iOS app with Swift to record traffic accident scenes and stream to reconstruction algorithm

Kesshou

Jun. 2015 – Jun. 2016

Project for Taipei Municipal Da-An Vocational High School to assist students

- Developed web crawler with Node.js to obtain information from school website, provided RESTful APIs
- Designed APP with Java to assist students by retrieving well-organized information and checking their grades

ACADEMIC SERVICE

Dept. of Computer Science and Information Engineering, NTUST

Taipei, Taiwan

Teaching Assistant — Object Oriented Programming

Spring 2018

Teaching Assistant — Computer Programming

Fall 2017

Natural Language Processing and Sentiment Analysis Lab, Academia Sinica

Taipei, Taiwan

Conference Reviewer: IAAI 2022, AAAI 2022, NLPCC 2021, IAAI 2021