

Shi-Yan (Eddie) Weng

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Summary

Currently undergraduate student at National Taiwan Normal University. **Hands-on experiences in Kaldi, Espnet, Linux and Pytorch.** Exploring NLP and Speech Processing and trying to integrate them for better application. Enjoy and willing to accept new techniques to tackle the problems. Interested in devising a better problem-solving method for challenging tasks, and learning new technologies and tools if the need arises.

Education

National Taiwan Normal University

M.S. IN COMPUTER SCIENCE AND INFORMATION ENGINEERING

Taipei, Taiwan

Sep. 2020 -

National Taiwan Normal University

B.S. IN COMPUTER SCIENCE AND INFORMATION ENGINEERING

Taipei, Taiwan

Sep. 2016 - Aug. 2020

- awarded 2019 Outstanding Student Award

Honors & Awards

INTERNATIONAL

2018 **Honorable Mention**, The 2018 ICPC Asia Singapore Regional Contest

Singapore

2018 **Honorable Mention**, The 2018 ICPC Asia Taipei Regional Contest

Taipei, Taiwan

DOMESTIC

2019 **MOST College Student Research Scholarship**, awarded by Ministry of Science and Technology

Taiwan

2019 **Runner-up of Best Poster Presentation Award**, ROCLING 2019

New Taipei City,
Taiwan

2018 **Honorable Mention**, National Collegiate Programming Contest

Taipei, Taiwan

2018 **First Place of Breakthrough Group**, 2018 ITSA Annual Collegiate Programming Contest

Taipei, Taiwan

Publications

A Hierarchical Encoding Framework for Text Readability Prediction

ROCLING 2019

New Taipei City, Taiwan

SHI-YAN WENG, HOU-CHIANG TSENG, YAO-TING SUNG, BERLIN CHEN

Oct. 3 - Oct. 5 2019

- Presented a hierarchical framework to encode both the semantic or syntactic structures for better readability classification.
- Combined extra use of traditional handcrafted feature as side information to further boost the model's performance.
- Awarded Runner-up of Best Poster Presentation Award.

An Effective Contextual Language Modeling Framework for Speech Summarization with Augmented Features

EUSIPCO 2020

Amsterdam, Netherlands

SHI-YAN WENG, TIEN-HONG LO, BERLIN CHEN

Jan. 18-Jan.22, 2021

- Adopt and contextualize the state-of-the-art BERT-based model for speech summarization.
- Explore the incorporation of confidence scores to see if such an attempt could help alleviate the negative effects caused by imperfect ASR.
- Augmented the sentence embeddings obtained from BERT with extra structural and linguistic features to boost the performance.

An Effective End-to-End Modeling Approach for Mispronunciation Detection

Submitted to Interspeech 2020

TIEN-HONG LO, SHI-YAN WENG, BERLIN CHEN

- Presented a novel use of hybrid CTC-Attention approach to the Mispronunciation Detection task.
- Performed input augmentation with text prompt information to make E2E model more tailored for the Mispronunciation Detection task.

The NTNU System at the Interspeech 2020 Non-Native Children's Speech ASR Challenge

Submitted to Interspeech 2020

TIEN-HONG LO, FU-AN CHAO, SHI-YAN WENG, BERLIN CHEN

- Technical Report of the Interspeech 2020 Non-Native Children's Speech ASR Challenge supported by the SIG-CHILD group of ISCA.
- Achieved **Second place** in the competition.
- We built our ASR system on top of CNN-TDNNF-based acoustic models and tried various data augmentation strategies.