

Yu-Wen Chen

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RESEARCH INTERESTS

Speech Assessment, Speech Processing, Natural Language Processing, Machine Learning

EDUCATION

Columbia University in the City of New York

New York, NY, United States

Ph.D. student in Computer Science

Sep 2022 - Present

- Speech Lab, Advisor: Prof. Julia Hirschberg

National Taiwan University

Taipei, Taiwan

M.S. in Electrical Engineering, Computer Science, GPA: 4.11/4.3

Sep 2017 - Jun 2019

- Taiwan Evolutionary Intelligence Laboratory, Advisor: Prof. Tian-Li Yu

National Cheng Kung University

Tainan, Taiwan

B.S. in Electrical Engineering, GPA: 92.05/100, Ranking: 2/37

Sep 2013 - Jun 2017

- **Outstanding student for the academic achievement
in the school year 2013-2014, 2014-2015, and 2015-2016**

EMPLOYMENT

Amazon

Seattle, WA, United States

Applied Scientist Intern, AGI-Automatic Speech Recognition

May 2024 - Aug 2024

Research Center for Information Technology Innovation, Academia Sinica

Taipei, Taiwan

Research Assistant, Biomedical Acoustic Signal Processing Lab

Feb 2020 - Aug 2022

- Principal Investigator: Prof. Yu Tsao

Industrial Technology Research Institute

Hsinchu, Taiwan

Intern, Electronic and Optoelectronic System Research Laboratories

Nov 2017 - Jun 2019

PUBLICATIONS

Peer-Reviewed Conference/Journal Papers

- **Chen, Y. W., Yu, Z., & Hirschberg, J., (2024) “MultiPA: A Multi-task Speech Pronunciation Assessment Model for Open Response Scenarios,”** accepted by *INTERSPEECH*.
- **Zevario, R. E., Chen, Y. W., Fu, S. W., Tsao, Y., Wang, H. M., & Fuh, C. S. (2024). “A Study on Incorporating Whisper for Robust Speech Assessment,”** accepted by *IEEE International Conference on Multimedia and Expo (ICME)*.
- **Chen, Y. W., Wang, H. M., & Tsao, Y. (2023) “BASPRO: A Balanced Script Producer for Speech Corpus Collection Based on the Genetic Algorithm.”** *APSIPA Transactions on*

Signal and Information Processing: Vol. 12: No. 3.

- **Chen, Y. W., & Tsao, Y. (2022). “InQSS: A Speech Intelligibility and Quality Assessment Model Using a Multi-task Learning Network.” *INTERSPEECH*, 3088-3092.**
- **Chen, Y. W., Hung, K. H., Li, Y. J., Kang, A. C. F., Lai, ... & Tsao, Y. (2022) “CITISEN: A Deep Learning-based Speech Signal-processing Mobile Application.” *IEEE Access*, 10, 46082-46099.**
- **Chen, Y. W., Hung, K. H., Chuang, S. Y., Sherman, J., Huang, W. C., Lu, X., & Tsao, Y. (2021) “EMA2S: An End-to-end Multimodal Articulatory-to-speech System.” *IEEE International Symposium on Circuits and Systems (ISCAS)*, 1-5.**
- **Chen, Y. W., Hung, K. H., Chuang, S. Y., Sherman, J., Lu, X., & Tsao, Y. (2021) “A Study of Incorporating Articulatory Movement Information in Speech Enhancement.” *IEEE European Signal Processing Conference (EUSIPCO)*, 496-500.**

Peer-Reviewed Workshop Papers

- **Chen, Y. W., & Hirschberg, J. (2024). “Exploring Robustness in Doctor-Patient Conversation Summarization: An Analysis of Out-of-Domain SOAP Notes,”** accepted by *Clinical NLP Workshop 2024*.

Google scholar: <https://scholar.google.com/citations?user=8r7SRL0AAAAJ>

TEACHING

Teaching Assistant

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|---|--|
| - COMS-E6998 Advanced Topics in Spoken Language Processing
Instructors: Julia Hirschberg | Columbia University
Spring 2024 |
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Instructors: Julia Hirschberg | Columbia University
Spring 2023 |