# Yen Meng

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## Education

**University of Edinburgh**                                      *Edinburgh, Scotland*
INCOMING PH.D. CANDIDATE IN ILCC, SCHOOL OF INFORMATICS          *Starting from Sept 2023*

**Nation Taiwan University**                                     *Taipei, Taiwan*
M.S. IN COMMUNICATION ENGINEERING, DATA SCIENCE AND SMART NETWORKING GROUP          *Sept 2021 - Jun 2023*
- Speech Processing and Machine Learning Laboratory. Advised by Prof. *Lin-Shan Lee* and Prof. *Hung-yi Lee*

**Nation Taiwan University**                                     *Taipei, Taiwan*
B.S. IN ELECTRICAL ENGINEERING                                   *Sept 2017 - Jun 2021*
- Undergraduate project in Speech Processing and Machine Learning Laboratory. Advised by Prof. *Lin-Shan Lee*

## Research Experience

**Speech Processing and Machine Learning Laboratory**           *National Taiwan University*
ADVISORS: PROF. *Lin-Shan Lee* & PROF. *Hung-yi Lee*            *2021 - Present*
- Data bias in self-supervised speech models
- Sequence compression for self-supervised speech models

**Frederick Jelinek Memorial Summer Workshop (JSALT, JHU Summer Workshop)**     *Baltimore, MD, U.S.A. (remote)*
COMPRESSION TEAM & SPEECH-TEXT PRE-TRAINING TEAM               *2022 Summer*
- Work accepted to 2022 SLT
- Presenter at JSALT workshop

## Publications & Preprints

PUBLISHED  (*equal contribution)

- Hsuan-Jui Chen*, **Yen Meng**\*, and Hung-yi Lee. "Once-For-All Sequence Compression for Self-Supervised Speech Models". *ICASSP 2023*

- **Yen Meng**\*, Hsuan-Jui Chen*, Jiatong Shi, Shinji Watanabe, Paola Garcia, Hung-yi Lee, and Hao Tang. "On Compressing Sequences for Self-Supervised Speech Models". *SLT 2022*

- **Yen Meng**\*, Yi-Hui Chou*, Andy T. Liu, and Hung-yi Lee. "Don't speak too fast: The impact of data bias on self-supervised speech models". *ICASSP 2022*

## Awards & Honors

2023   **Fully-funded Informatics Graduate School Ph.D. Scholarship**, University of Edinburgh
2023   **Phi Tau Phi Award**, National Taiwan University

## Teaching Experience

**Deep Learning for Human Language Processing**                 *National Taiwan University*
TEACHING ASSISTANT                                              *Sept 2022 - Present*
- Guide research projects related to self-supervised speech models

**Machine Learning**                                            *National Taiwan University*
TEACHING ASSISTANT                                             *2021 Fall & 2022 Fall*
- Design an assignment of phoneme classification

**Introduction to Digital Speech Processing**                                       *National Taiwan University*

Teaching Assistant                                                                                      *2022 Fall*

- Responsible for an assignment and preparing examination papers

## Work Experience

**Speech Processing and Machine Learning Laboratory**                                    *Taipei, Taiwan*

computing resource & system administrator                                         *Sept 2021 - Feb. 2023*

- Responsible for Slurm workload management (a compute node cluster with 30+ GPUs)
- Taiwan Computing Cloud (TWCC) resource management

**Line Taiwan Limited**                                                                         *Taipei, Taiwan*

Data Scientist Intern                                                                    *Feb 2021 - Sept 2021*

- Explainable recommendation system
- Entity linking for integrating services across platforms

**Taiwan Semiconductor Manufacturing Co., Ltd. (TSMC)**                              *Hsinchu, Taiwan*

Software Engineer Summer Intern                                                        *Jul 2020 - Aug 2021*

- Web Service
- Machine Learning for defect analysis

## Other Projects

**Adversarial Attack on Voice Cloning**                                              *National Taiwan University*

Security and Privacy of Machine Learning advised by Prof. *Shang-Tse Chen*                  *2021 Fall*

- Adding adversarial perturbations on raw audio preventing one's voice to be cloned by personalized TTS systems
- Attack on speaker encoding-based model
- Experiment with vanilla & imperceptible attacks

## Academic Services

2022    **ISCSLP 2022**, Official Reviewer

2022    **ICASSP 2023**, Official Reviewer

2023    **MLSP 2023**, Official Reviewer

## Skills

**Programming**

Python, C/C++, HTML/CSS, JavaScript

**Deep Learning Framework**

Pytorch