

# Yen Meng

☎ +886-975276220 | ✉ anne.meng88@gmail.com | 🌐 yenmeng

## Education

### University of Edinburgh

INCOMING PH.D. IN ILCC, SCHOOL OF INFORMATICS

Edinburgh, Scotland

Starting from Sept 2023

### Nation Taiwan University

M.S. IN COMMUNICATION ENGINEERING, DATA SCIENCE AND SMART NETWORKING GROUP

Taipei, Taiwan

Sept 2021 - Jun 2023

- Speech Processing and Machine Learning Laboratory. Advised by Prof. Lin-Shan Lee and Prof. Hung-yi Lee

### Nation Taiwan University

B.S. IN ELECTRICAL ENGINEERING

Taipei, Taiwan

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

ADVISORS: PROF. Lin-Shan Lee & PROF. Hung-yi Lee

National Taiwan University

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)

COMPRESSION TEAM & SPEECH-TEXT PRE-TRAINING TEAM

Baltimore, MD, U.S.A. (remote)

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

TEACHING ASSISTANT

National Taiwan University

Sept 2022 - Present

- Guide research projects related to self-supervised speech models

### Machine Learning

TEACHING ASSISTANT

National Taiwan University

2021 Fall & 2022 Fall

- Design an assignment of phoneme classification

## Introduction to Digital Speech Processing

### TEACHING ASSISTANT

- Responsible for an assignment and preparing examination papers

National Taiwan University

2022 Fall

## Work Experience

---

### Speech Processing and Machine Learning Laboratory

#### COMPUTING RESOURCE & SYSTEM ADMINISTRATOR

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

Taipei, Taiwan

Sept 2021 - Feb. 2023

### Line Taiwan Limited

#### DATA SCIENTIST INTERN

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

Taipei, Taiwan

Feb 2021 - Sept 2021

### Taiwan Semiconductor Manufacturing Co., Ltd. (TSMC)

#### SOFTWARE ENGINEER SUMMER INTERN

- Web Service
- Machine Learning for defect analysis

Hsinchu, Taiwan

Jul 2020 - Aug 2021

## Other Projects

---

### Adversarial Attack on Voice Cloning

#### SECURITY AND PRIVACY OF MACHINE LEARNING ADVISED BY PROF. Shang-Tse Chen

- 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

National Taiwan University

2021 Fall

## 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