CHIN-JOU LI

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EDUCATION

Carnegie Mellon University   Pittsburgh, PA
Master of Science in Intelligent Information Systems, Language Technologies Institute | GPA: 3.9/4.0   *Dec 2025*
- Selected Coursework: Advanced NLP, Speech Recognition and Understanding

National Taiwan University   Taipei, Taiwan
Bachelor of Science, Computer Science and Information Engineering | GPA: 3.99/4.30   *June 2024*
- Selected Coursework: Algorithm Design and Analysis, ML, Applied DL, NLP

SKILLS

Technical skills   Python, PyTorch, Linux, C/C++

Languages   Chinese (Native), English (Fluent), French (Intermediate)

RESEARCH EXPERIENCE

ChangeLing Lab, Carnegie Mellon University   Pittsburgh, PA
Graduate Researcher   *Sep 2024 - Present*
- Advised by Prof. David Mortensen
- Exploring phonetic-based speech modeling and inclusive speech recognition

Intelligent Agents Lab, National Taiwan University   Taipei, Taiwan
Undergraduate Researcher   *Oct 2022 - June 2024*
- Advised by Prof. Jane Yung-Jen Hsu
- Handled natural language data in the Trustworthy AI Dialogue Engine (TAIDE) project

Biomedical Acoustic Signal Processing Lab, Academia Sinica   Taipei, Taiwan
Research Assistant   *July 2022 - Feb 2024*
- Advised by Prof. Yu Tsao and Dr. Jen-Cheng Hou
- Researched audio-visual speech enhancement and audio-visual speaker diarization

Taipei Veterans General Hospital   Taipei, Taiwan
Research Assistant   *Jan 2023 - Dec 2023*
- Evaluated face transformation in seizure dataset for privacy protection
- Investigated action recognition through transformer for predicting seizure types

PUBLICATIONS

Epileptic Seizure Classification with Patient-Level and Video-Level Contrastive Pretraining   EMBC 2024
Chin-Jou Li, Chien-Chen Chou, Yen-Cheng Shih, Li-Chuan Kuo, Yu-Te Wang, Aileen McGonigal, Hsiang-Yu Yu, Jen-Cheng Hou, Yu Tsao

Deep Complex U-Net with Conformer for Audio-Visual Speech Enhancement   Interspeech 2024 AVSEC Workshop
Shafique Ahmed, Chia-Wei Chen, Wenze Ren, **Chin-Jou Li**, Ernie Chu, Jun-Cheng Chen, Amir Hussain, Hsin-Min Wang, Yu Tsao, Jen-Cheng Hou

Face swapping in seizure videos for patient deidentification   Epilepsy Research
Chin-Jou Li, Jen-Cheng Hou, Chien-Chen Chou, Yen-Cheng Shih, Stephane Dufau, Po-Tso Lin, Yu Tsao, Aileen McGonigal, Hsiang-Yu Yu

AI-based face transformation in patient seizure videos for privacy protection   MCP: Digital Health
Jen-Cheng Hou, **Chin-Jou Li**, Chien-Chen Chou, Yen-Cheng Shih, Si-Lei Fong, Stephane Dufau, Po-Tso Lin, Yu Tsao, Aileen McGonigal, Hsiang-Yu Yu

Selected Projects

ChangeLing Lab, Carnegie Mellon University   Pittsburgh, PA
Phonetic Speech Foundation Model   *Sep 2024 - Present*
- Building a phonetic specch foundation model, co-advised by Prof. Shinji Watanabe

ChangeLing Lab, Carnegie Mellon University   Pittsburgh, PA
Data Augmentation for Pathological Speech   *Sep 2024 - Present*
- Investigating voice conversion on cross-lingual dysarthric speech

Speech Recognition and Understanding, Carnegie Mellon University   Pittsburgh, PA
Training Decoder-Only ASR with Long Context   *Oct 2024 - Dec 2024*
- Explored techniques for handling extended context with limited computing resource
- Applied RoPE and cache retrieval to an ASR system

Intelligent Agents Lab, National Taiwan University   Taipei, Taiwan
Trustworthy AI Dialogue Engine (TAIDE)   *Mar 2023 - June 2024*
- Visualized dataset diversity via Elasticsearch and Kibana
- Constructed LLM hallucination benchmarks in Traditional Chinese

Biomedical Acoustic Signal Processing Lab, Academia Sinica   Taipei, Taiwan
EGO4D Audio-Visual Speaker Diarization Challenge 2023   *March 2023 - May 2023*
- Established a pipeline of face detection and tracking, active speaker detection, and audio embeddings
- Coordinated the teams in charge of each module
- Enhanced accuracy on validation data by 5% and diarization error rate by 3%

Biomedical Acoustic Signal Processing Lab, Academia Sinica   Taipei, Taiwan
1st COG-MHEAR AVSE Challenge   *July 2022 - Sep 2022*
- Denoised audio by incorporating visual information through a deep complex convolution recurrent network
- Outperformed baseline model with a 40.7% and 23.8% improvement of the PESQ and the STOI metrics

Leadership Experience

Natural Language Processing, Carnegie Mellon University   Pittsburgh, PA
Teaching Assistant   *Jan 2025 - Present*
- Assisting in CMU's 11-411/611 NLP course

Network Administration and System Administration Team, National Taiwan University   Taipei, Taiwan
Teaching Assistant / DNS Group Member   *Sep 2022 - June 2024*
- Monitored network stability for the CS department
- Guided new members and students in training courses

Open Culture Foundation   Taipei, Taiwan
Intern   *Sep 2023 - Jan 2024*
- Translated articles about open technology, digital rights, and internet freedom
- Facilitated execution of events and exchanges