

# Guan-Ting Lin

☎ (+886) 905286016 | ✉ daniel094144@gmail.com | 🌐 <https://daniellin94144.github.io/> | 📺 DanielLin94144 | 📷 guan-ting-lin

## Research Interests

Speech LLMs, Full-Duplex Interaction, Spoken Language Understanding & Generation, and Test-Time Adaptation for ASR.

## Education

### National Taiwan University (NTU)

PH.D. IN COMMUNICATION ENGINEERING, EECS COLLEGE

Taipei, Taiwan

Sep. 2021 – Dec. 2025 (expected)

- **GPA:** 4.24/4.3; Ranking: 15/158
- Speech Processing and Machine Learning Laboratory. Advised by Prof. Hung-yi Lee.
- Transferred from M.S. program in Feb. 2023.
- **Selected Courses:** Deep Learning for Human Language Processing, Machine Learning, Digital Speech Processing, Security and Privacy of Machine Learning, Deep Learning for Music Analysis and Generation.

### National Tsing Hua University (NTHU)

B.S. BIOMEDICAL ENGINEERING & ADVANCED AI PROGRAM

Hsinchu, Taiwan

Sep. 2017 – Jun. 2021

- **GPA:** 4.08/4.3; Ranking: 1/48
- **Honors:** 3 Deans's List (top 5% students of the department), Phi Tau Phi Award (top 1 student), The Zhu Shun Yi He Qin Scholarship

## Research Experience

### Speech Processing and Machine Learning Lab @ NTU

Taipei, Taiwan

**Undergraduate** → **Graduate Researcher** / ADVISOR: Prof. Hung-yi Lee

July. 2020 – Present

- Full-duplex speech dialogue model [ASRU'25].
- Multi-modal large language models for speech speaking styles and spoken dialogue [ACL'24, EMNLP'24].
- Self-supervised representation learning for speech [Interspeech'21, SLT'22].
- End-to-end spoken language understanding and spoken question answering [Interspeech'22'23, ICASSP'24].
- Test-time Adaptation on end-to-end automatic speech recognition models [Interspeech'22, EMNLP'24 Findings, ASRU'25].

### Meta

Menlo Park, United States

**Research Scientist Intern**

Aug. 2025 – Nov. 2025

- Meta Superintelligence Lab (MSL) Voice Modeling Team.

### Google DeepMind

New York, United States

**Student Researcher** / HOST: Dr. Kartik Audhkhasi, Dr. Bhuvana Ramabhadran

Feb. 2025 – April. 2025

- Under Gemini speech team. Improving large multi-modal models for speech recognition.
- The project has been filed as a **U.S. patent** application by Google.

### Amazon AGI-Speech

Seattle, United States

**Applied Scientist II Intern** / HOST: Dr. Prashanth Gurunath Shivakumar

June. 2024 – Sep. 2024

- Proposed **Align-SLM**, an end-to-end speech-to-speech model with RL [ACL'25]
- Achieves state-of-the-art performance and lays the foundational technique for the production Nova Sonic model.

### Amazon Alexa AI (ASR LM team)

Seattle, United States

**Applied Scientist II Intern** / HOST: Dr. Prashanth Gurunath Shivakumar, Dr. Andreas Stolcke

June. 2023 – Sep. 2023

- Proposed **ParalinGPT**, a paralinguistics-enhanced multi-modal large language model for spoken dialogue [ICASSP'24].

### Amazon Alexa AI (Alexa Perceptual team)

Cambridge, United States

**Applied Scientist I Intern** / HOST: Dr. Chieh-Chi Kao, Dr. Qingming Tang

July. 2022 – Oct. 2022

- Weight-sharing neural architecture search approach on acoustic event classification models [ICASSP'23].

### 8th JASLT Summer Workshop

Baltimore, United States

**Visiting Researcher**, ADVISOR: Prof. Nigel Ward, Prof. Hung-yi Lee

July. 2022

- Self-supervised speech representation learning for prosody [Best Paper Award of SLT'22].

## Selected Publications & Preprints

Please see the [google scholar](#) for full publications. \* indicates equal contribution.

- Guan-Ting Lin, Jiachen Lian, Tingle Li, Qirui Wang, Gopala Anumanchipalli, Alexander H. Liu, Hung-yi Lee, “Full-Duplex-Bench: A Benchmark to Evaluate Full-duplex Spoken Dialogue Models on Turn-taking Capabilities”, **ASRU 2025**
- Guan-Ting Lin\*, Wei-Ping Huang\*, Hung-yi Lee, “SUTA-LM: Bridging Test-Time Adaptation and Language Model Rescoring for Robust ASR”, **ASRU 2025**
- Guan-Ting Lin, Prashanth Gurunath Shivakumar, Aditya Gourav, Yile Gu, Ankur Gandhe, Hung-yi Lee, Ivan Bulyko, “Align-SLM: Textless Spoken Language Models with Reinforcement Learning from AI Feedback”, **ACL 2025**
- Guan-Ting Lin\*, Wei-Ping Huang\*, Hung-yi Lee, “Continual Test-time Adaptation for End-to-end Speech Recognition on Noisy Speech”, **EMNLP 2024**

- Guan-Ting Lin, Hung-yi Lee, “Can LLMs Understand the Implication of Emphasized Sentences in Dialogue?”, *EMNLP 2024 Findings*
- Guan-Ting Lin, Cheng-Han Chiang, Hung-yi Lee, “Advancing Large Language Models to Capture Varied Speaking Styles and Respond Properly in Spoken Conversations”, *ACL 2024*
- Guan-Ting Lin, Prashanth Gurunath Shivakumar, Ankur Gandhe, Chao-Han Huck Yang, Yile Gu, Shalini Ghosh, Andreas Stolcke, Hung-yi Lee, Ivan Bulyko, “Paralinguistics-Enhanced Large Language Modeling of Spoken Dialogue”, *ICASSP 2024*
- Chyi-Jiunn Lin, Guan-Ting Lin, Yung-Sung Chuang, Wei-Lun Wu, Shang-Wen Li, Abdelrahman Mohamed, Hung-yi Lee, Lin-shan Lee, “SpeechDPR: End-to-End Spoken Passage Retrieval for Open-Domain Spoken Question Answering”, *ICASSP 2024*
- Guan-Ting Lin\*, Guan-Wei Wu\*, Shang-Wen Li, Hung-yi Lee, “Improving Textless Spoken Language Understanding with Discrete Units as Intermediate Target”, *Interspeech 2023*
- Guan-Ting Lin, Qingming Tang, Chieh-Chi Kao, Viktor Rozgic, Chao Wang, “Weight-sharing Supernet for Searching Specialized Acoustic Event Classification Networks Across Device Constraints”, *ICASSP 2023*
- Guan-Ting Lin\*, Chi-Luen Feng\*, Wei-Ping Huang, Yuan Tseng, Tzu-Han Lin, Chen-An Li, Hung-yi Lee, Nigel G. Ward, “On the Utility of Self-supervised Models for Prosody-related Tasks”, *SLT 2022 Best Paper Award (2 out of 363 accepted papers)*
- Guan-Ting Lin, Yung-Sung Chuang, Ho-Lam Chung, Shu-wen Yang, Hsuan-Jui Chen, Shang-Wen Li, Abdelrahman Mohamed, Hung-yi Lee, Lin-shan Lee, “DUAL: Textless Spoken Question Answering with Speech Discrete Unit Adaptive Learning”, *Interspeech 2022*
- Guan-Ting Lin, Shang-Wen Li, Hung-Yi Lee, “Listen, Adapt, Better WER: Source-free Single-utterance Test-time Adaptation for Automatic Speech Recognition”, *Interspeech 2022*
- Guan-Ting Lin\*, Chan-Jan Hsu\*, Da-Rong Liu, Hung-Yi Lee, Yu Tsao, “Analyzing the Robustness of Unsupervised Speech Recognition”, *ICASSP 2022*
- Shu-wen Yang, Po-Han Chi, Yung-Sung Chuang, Cheng-I Jeff Lai, Kushal Lakhotia, Yist Y. Lin, Andy T. Liu, Jiatong Shi, Xuankai Chang, Guan-Ting Lin, Tzu-Hsien Huang, Wei-Cheng Tseng, Ko-tik Lee, Da-Rong Liu, Zili Huang, Shuyan Dong, Shang-Wen Li, Shinji Watanabe, Abdelrahman Mohamed, Hung-yi Lee, “SUPERB: Speech processing Universal PERFORMANCE Benchmark”, *Interspeech 2021*

## Honors & Awards

### AWARDS

2024	<b>IEEE Signal Processing Society Travel Grant</b> , Awarded with 500 USD for attending ICASSP 2024	Seoul, Korea
2023	<b>Best Paper Award</b> , One of the two best papers in IEEE SLT 2022, awarded with 500 USD	Doha, Qatar
2023	<b>NTU Elite Doctoral Scholarship</b> , 4-year scholarship, only one student of each department.	Taiwan
2023	<b>GICE Elite Doctoral Scholarship</b> , The joint 4-year scholarship from Graduate Institute of Communication Engineering and NVIDIA	Taiwan
2022	<b>ISCA Travel Grant</b> , Awarded with 600 Euros for attending Interspeech 2022, only 60 students were selected.	Incheon, Korea
2022	<b>Appier scholarship for international top AI conferences</b> , Awarded with 25000 NTD for Interspeech 2022.	Taiwan
2020	<b>The Zhu Shun Yi He Qin Scholarship</b> , The highest honor for National Tsing Hua University student with about 3000 USD prize.	Taiwan
Jun. 2021	<b>Phi Tau Phi Award</b> , Top 1 graduation student of the department.	Taiwan
2018–9	<b>3 Deans's List</b> , Top 5% students of the department, (2018 Spring/2018 Fall/2019 Fall in NTHU).	Taiwan
Feb. 2021	<b>Excellent Achievement</b> , 2020 AI CUP Competition on Medical Dialogue Decision: Deidentity Task, 15/531 (top 3%) with 300 USD prize	Taiwan
2020	<b>Top 40</b> , From IP TO IPO program (FITI). Innovation and entrepreneurship competition with 1000 USD prize	Taiwan

### ACADEMIC SERVICES

Sep. 2021-	<b>Reviewers</b> , ICLR'24'25, NeurIPS'24'25, ACL'24'25, EMNLP'24, NAACL'23'24'25, ICASSP'23'24, ISCSLP'22'23'24,
Present	COLING'25
2025	<b>Notable Reviewer</b> , ICLR 2025

## Teaching

### Machine Learning Summer School 2021, Taipei

Head Teaching Assistant

Managed 31 virtual Machine Learning courses with worldwide lecturers, and a Facebook group for 1400 international participants.

#### 2021 Fall - Linear Algebra

Teaching Assistant

Designed 1D and 2D Discrete cosine transform homework for JPEG compression.

#### 2022 Spring - Machine Learning 2022 Spring

Teaching Assistant

Designed assignment for Black-box Adversarial Attack on CIFAR 10.

National Taiwan University

2021 summer

National Taiwan University

2021 Fall

National Taiwan University

2022 Spring