Trang Tran

Speech & natural language processing, prosody
Applications in health, education

Web: ttmt001.github.io
Email: ttmt001.snlp@gmail.com
Google Scholar: Trang Tran
Github: trangham283

EXPERIENCE

audEERING GmbH, Gilching, Germany (remote) *06/2025-present*
Senior AI Researcher (Visiting)

Develop and evaluate spoken language models for an intelligent voice assistant: including data processing pipelines, model architecture design, audio LLM finetuning, conversation management strategies

Reality Defender, New York, NY (remote) *11/2023–01/2025*
Applied Scientist II – Audio

Develop and analyze models for audio deepfake detection; focus on audio perception and understanding [10,11]

Institute for Creative Technologies, Los Angeles, CA *12/2020–10/2023*
Postdoctoral Researcher

Develop and analyze multimodal models for understanding dialog patterns in motivational interviews (MI); focus on predicting MI intent codes, estimating empathy perception and correlation to behavioral outcomes, identifying salient features in MI to aid clinicians in diagnosis and therapist training [7,8,9]

University of Washington, Seattle, WA *06/2014–12/2020*
Graduate Research Assistant in Speech and Natural Language Processing

- Develop models for integrating prosodic and acoustic features in spoken language tasks, analyze effects of speech styles and conditions (conversational vs. read, manual vs. ASR transcripts) [3,4,5,6]
- Analyze disfluency patterns in children's speech, contribute to extending annotation system for children's speech transcript; study acoustic models for prosodic patterns in language acquisition and learning [2]
- Develop style & topic models for characterizing language of reddit discussions; assess the correlation between style vs. topic similarity with endorsement [1]

Liulishuo/LingoChamp (now LAIX), San Mateo, CA *06/2018–09/2018*
Research Intern

Develop and evaluate models to incorporate prosodic-acoustic information in parsing for second language learning; analyze the differences of native vs. non-native speech effects on parsing [5]

Amazon Alexa Shopping, Seattle, WA *06/2017–08/2017*
Applied Scientist Intern

Develop and evaluate ranking algorithms for selecting Amazon Choice items in recommendation; analyzed the utility of language features

Bucknell University, Lewisburg, PA *08/2012–05/2014*
Graduate Research Assistant

Developed and evaluated filter- and inventory-based systems for voice conversion and speech enhancement

EDUCATION

University of Washington, Seattle, WA *06/2014–12/2020*
PhD in Electrical Engineering
Thesis: Neural Models for Integrating Prosody in Spoken Language Understanding

Bucknell University, Lewisburg, PA *08/2012–05/2014*
MS in Electrical Engineering
Thesis: Noise-Robust Voice Conversion

Bucknell University, Lewisburg, PA *08/2007–05/2012*
BS in Electrical Engineering & BA in Economics

REFERENCED PUBLICATIONS
[11] Zhu et al., ASVSpoof 2024
[10] Zhu et al., NeurIPS 2024
[9] Tran et al., ICMI 2023
[8] Tavabi et al., ACII 2023
[7] Tavabi et al., CLPsych 2021
[6] Tran & Ostendorf, Interspeech 2021
[5] Tran et al., Interspeech 2019
     Best Student Paper Nominee
[4] Zayats et al., Interspeech 2019
[3] Tran et al., NAACL 2018
[2] Tran et al., Interspeech 2020
[1] Tran & Ostendorf, EMNLP 2016