Trang Tran

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

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EXPERIENCE

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

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

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

Develop and analyze models for audio deepfake detection, with focus on audio understanding tasks including: audio event detection, speaker diarization, quality assessment, language detection [10,11]

Institute for Creative Technologies, Los Angeles, CA   *12/2020-09/2023*
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

Develop and evaluate robust voice conversion and speech enhancement systems

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

SKILLS

ML Frameworks/Tools: torch[audio], transformers, librosa, pandas, wandb, sklearn, AWS, GCP

Natural Languages: Vietnamese (native), English (fluent)

HONORS & AWARDS

University of Washington Society of Women Engineers Outstanding Female Engineer Award, 2020

University of Washington Clairmont L. Egtvedt Endowed Engineering Fellowship, 2020

Bucknell University Fremont International Student Scholarship, 2007–2012

Honor Societies: Phi Beta Kappa, Tau Beta Pi

SERVICE & OUTREACH

Action Editor (area chair) for ACL Rolling Review, 2021 – present

Academic Conference Reviewer
- Interspeech 2023 – present
- ICMI 2021 – present
- ACL 2020 – present
- EMNLP 2019 – present

Interspeech Mentoring Committee ISCA Student Advisory Committee, 2021 – present

Student Advisory Council UW Electrical & Computer Engineering, 2019 – 2020

Research Mentor 1 PhD student, 2 Master's students 2020 – 2023; 3 Undergraduate (REU) student interns 2021 – 2023

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