Trang Tran

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

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, 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

06/2014-12/202

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

SKILLS

Computing: python (pytorch, sklearn), bash, MATLAB

Languages: Vietnamese (native), English (fluent), French (conversational)

HONORS & AWARDS

Web: ttmt001.github.io

Github: trangham283

Email: ttmt001.snlp@gmail.com
Google Scholar: Trang Trang

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

Virtual Platform Co-chair ACII 2021

Academic Conference Reviewer

- Interspeech 2023 present
- ICMI 2021 present
- ACL 2020 present
- EMNLP 2019 present
- Transactions of Affective Computing 2022-2023

Interspeech Mentoring CommitteeISCA 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] <u>Tran et al., ICMI 2023</u>

[8] Tavabi et al., ACII 2023

[7] Tavabi et al., CLPsych 2021

[6] Tran & Ostendorf, Interspeech 2021

Trair & Osteridori, interspecen 2021

[5] <u>Tran et al., Interspeech 2019</u> 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