# 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, 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

**SKILLS** 

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

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

#### **HONORS & AWARDS**

Web: ttmt001.github.io

Github: trangham283

Email: <a href="mailto:ttmt001.snlp@gmail.com">ttmt001.snlp@gmail.com</a>
Google Scholar: <a href="mailto:Trang Trang">Trang Trang</a>

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 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