SU ZHANG

EDUCATION

Ph.D. in Computer Sciences, Nanyang Technological UniversityJune, 2023Dissertation: Multimodal Continuous Emotion Analysis [PDF]July, 2018M.E. in Computer Engineering, Yunnan Normal University,July, 2018B.A. in Biological Chemistry, Xiamen University,June, 2013

RESEARCH EXPERIENCE

Research Fellow July, 2023 - Present

Center on Brain Computing Research, School of Computer Science and Engineering, NTU Singapore Professor Cuntai Guan with the A Sociometric AI Screening Tool to Risk-Stratify Infant Neurodevelopmental Trajectories (STARS):

- Developed a multimodal pipeline for emotion recognition on spontaneous infant-mother interaction videos
- · Analyzed infant's facial expressions w.r.t. cultural backgrounds, sexes, and ages
- Adopted the Pyannote library for speaker diarization on infant-mother interaction

PUBLICATIONS

- 1. **S. Zhang**, Y. Li, M. Smith, V. Leong, C. Guan, "Machine Learning based Audiovisual Emotion Recognition and Cross-cultural Analysis on Infants and Toddlers", *ACM Multimedia*, 2024, Under Review.
- 2. Y. Ding*, **S. Zhang***, C. Tang, C. Guan, "MASA-TCN: Multi-anchor Space-aware Temporal Convolutional Neural Networks for Continuous and Discrete EEG Emotion Recognition", *Journal of Biomedical and Health Informatics*, 2024. [PDF], [Code] (* indicates equal contribution)
- 3. **S. Zhang**, Z. Zhao, C. Guan, "Multimodal Continuous Emotion Recognition: A Technical Report for ABAW5", *IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshop* (Ranked 3rd), 2023. [PDF], [Code]
- 4. **S. Zhang**, R. An, Y. Ding, C. Guan, "Continuous Emotion Recognition Using Visual-audio-linguistic Information: A technical Report for ABAW3", *IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshop* (Ranked 2rd), 2022. [PDF], [Code]
- 5. **S. Zhang**, C. Tang, C. Guan, "Visual-to-EEG Cross-modal Knowledge Distillation for Continuous Emotion Recognition", *Pattern Recognition*, 2022. [PDF], [Code]
- 6. **S. Zhang**, W. Zhao, X. Hao, Y. Yang, C. Guan, "A Context-aware Locality Measure for Inlier Pool Enrichment in Stepwise Image Registration", *IEEE Transactions on Image Processing*, 2020. [PDF], [Code]
- 7. **S. Zhang**, Y. Yang, "Point Set Registration with Global-local Correspondence and Transformation Estimation", *IEEE International Conference on Computer Vision*, 2017.

TEACHING EXPERIENCE

Nanyang Technological University

Singapore

Teaching Assistant

Jan, 2019 - Aug, 2021

• Performed TA duties for multiple courses, including *Linear Algebra*, *Data Mining*, *Data Science and Artificial Intelligence*, *Digital Signal Processing*

ADDITIONAL INFORMATION

- Independent reviewer: IEEE TGRS, IEEE TAFFC, ACMMM
- Programming languages & Software: Python, Matlab
- Languages: Mandarin Chinese (native), English (proficient)