





Theodora Chaspari is an Assistant Professor in Computer Science & Engineering at Texas A&M University (TAMU). She has received a B.S. (2010) in Electrical & Computer Engineering from the National Technical University of Athens, Greece and M.S. (2012) and Ph.D. (2017) in Electrical Engineering from the University of Southern California (USC). Between 2010 and 2017 she was a Research Assistant at the Signal Analysis and Interpretation Laboratory at USC. Theodora's research interests lie in human-centered machine learning, affective computing, and biomedical health informatics. She is a recipient of the TEES Dean of Engineering Excellence Award (2022), NSF CAREER Award (2021), TAMU Montague Teaching Award (2021), and USC Women in Science and Engineering Merit Fellowship (2015). Papers co-authored with her students have been nominated and won awards at the ACM BuildSys 2019, IEEE ACII 2019, ASCE i3CE 2019, and IEEE BSN 2018 conferences. She is serving as an Editor of the Elsevier **Computer Speech & Language and Guest Editor of the IEEE** Transactions on Affective Computing. Her work is supported by federal and private funding sources, including the NSF, NIH, NASA, IARPA, AFOSR, General Motors, and the Engineering **Information Foundation.**

Vocal and Linguistic Analysis of Micro-behaviors in Diverse Team Interactions



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Wed, Apr 26 5:30PM (MT)



ZOOM VIRTUAL MEETING Free and Open to the Public Pre-registration required

https://unm.zoom.us/j/99509606353

Abstract:

Diverse teaming creates opportunities for approaching problems from different perspectives inspiring innovative ideas. Little research has focused on the interpersonal factors that affect diverse team functioning, with most emphasizing factors such as team composition and training. Micro-behaviors, which are brief, often unconscious expressions, words, and tone of voice that occur during team interactions, are rarely explored as factors that could impact the team dynamics. Due to their subtlety, micro-behaviors can be done subconsciously or in a fleeting manner that can go unnoticed, nonetheless, such behaviors play an important role in overall team dynamics rendering the detection of these behaviors crucial to forming intervention procedures geared toward ensuring successful team functioning. This presentation will discuss the effectiveness of linguistic and acoustic features extracted at the conversation level between interlocutors in automatically detecting micro-behaviors via machine learning. It will further present various ways to integrate contextual information about the occurring task and the underlying sentiment of the conversation in the microbehavior detection system. Results will be presented in two different settings. The first setting uses longitudinal data collected from teams during a 30-day space simulation in the Human **Exploration Research Analog (HERA) of the U.S. National** Aeronautics and Space Administration (NASA). The second setting will discuss preliminary findings from team interactions of first- and second-year undergraduate students in Science Technology Engineering and Mathematics (STEM) who were asked to solve programming tasks.

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