# **UNIVERSITY OF SOUTH FLORIDA**

#### **Major Research Area Paper Presentation**

Mitigating the Bias in Empathy Detection

by

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### For the Ph.D. degree in Computer Science and Engineering

Different levels of human emotion detection and analysis is the basis of affective computing. To facilitate the research there has been extensive work in collecting and analyzing huge amounts of data. Many times, when collecting data, bias can be present (e.g. gender, ethnicity, age). Considering this my research will identify the factors on which bias is based and develop approaches and datasets to mitigate some of this bias. I am currently investigating the influence of action units on emotions and how they can be used for accurately recognizing emotions and vice versa. In this paper, I detail why understanding biases is important, my overall research vision, a plan for my research moving forward, and I conclude with future work, challenges, and potential solutions to solve them.

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#### THE PUBLIC IS INVITED

Examining Committee Shaun Canavan, Ph.D., Major Professor Rangachar Kasturi, Ph.D. Marvin J. Andujar, Ph.D. Jeffrey F. Cohn, Ph.D. Pei-Sung Lin, Ph.D. Elizabeth Schotter, Ph.D.

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