EAGER:SaTC-EDU: Improving Cybersecurity Education for Adolescents with Autism Through Automated Augmented Self-Monitoring Applications

Charles E. Hughes, Lisa A. Dieker, University of Central Florida

https://ucf.edu/TeachLivE

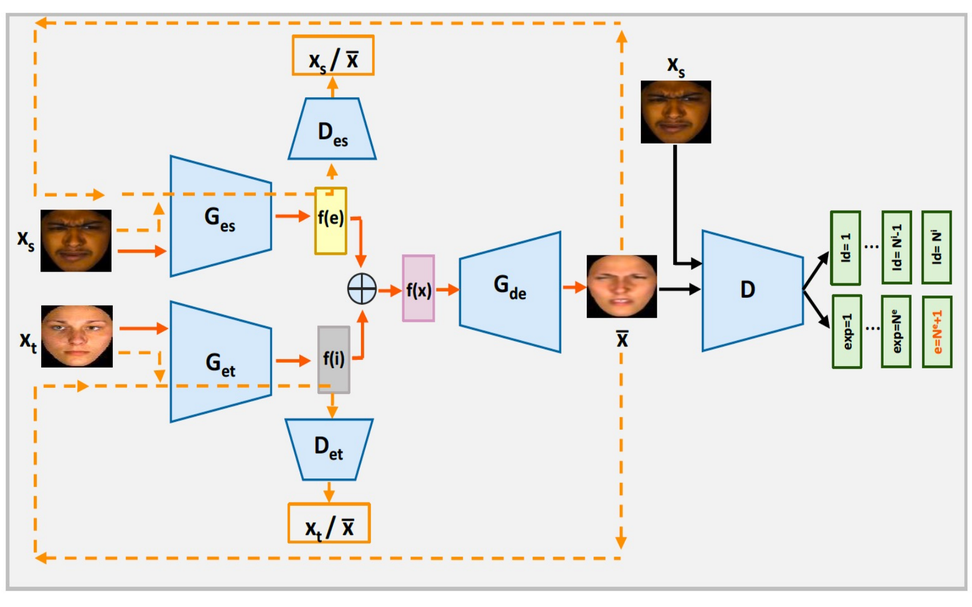
Video

Web Site

Acquiring emotional responses of participants is always hard; doing so when working with neurodiverse populations is hypothesized to be harder, but success here will translate across populations, including those exhibiting neurotypical behaviors.

While the currently funded effort focuses on adolescents with autism, all new results apply to current team efforts in working on STEM skills for younger children with autism. Currently, the team is working with children learning to program robots, but lessons learned will apply for any virtual learning environment focused on neurodiverse populations.

Informing agent behaviors through puppeteering



Disentangling identity from emotion
Fusing sources of emotional data

Children with autism are more likely to experience online bullying. Helping them deal with these situations will assist their emotional development and their readiness for entry into the workforce. Additionally, in a related effort, the team is working with police officers to develop better skills when dealing with citizens exhibiting neurodiverse behaviors.

Integration of multisensory data for a neurodiverse population has great potential for the broader population as improvements for populations facing challenges lead to improvements for the public.

Our goal is to contribute to the success of neurodiverse populations, with those with autism spectrum disorder (ASD) as the initial population. By focusing on replicable, effective learning experiences, the project potentially scales to all U.S. schools.

NSF Grant# 2114808