



COLLEGE of ENGINEERING AND PHYSICAL SCIENCES

SCHOOL OF COMPUTER SCIENCE

MSc Defence

Friday April 23, 2021 at 2PM on Zoom

Supporting d/Deaf and Hard of Hearing employees in their workplaces through technology, design, and community

Dar'ya Heyko

Chair: Dr. Mark Wineberg

Advisor: Dr. David Flatla

Advisory Member: Dr. Stacey Scott

Non-Advisory Member: Dr. Luiza Antonie

ABSTRACT:

DHH (d/Deaf and hard of hearing) employees experience unique challenges in their workplaces, especially under hearing supervisors. Although interventions and solutions can help address these challenges, care must be taken to select the most appropriate solutions as some of them such as hearing loss simulations have placed DHH people at a disadvantage. To critically identify potential solutions, I conducted two surveys, an autoethnography, and a Persona Driven Inquiry with 19 DHH employees and six parents of DHH children (surveys), personal work experiences (autoethnography), and a young DHH persona (PDI).

My findings showed that while there were some appropriate resources to address challenges DHH employees face, there are still many challenges. Informed by these findings, I propose and discuss seven potential solutions, recommending five of them with two (incorporating DHH people as co-designers and disability education in computer science) as the most beneficial to pursue in future work. By identifying these potential solutions, DHH employees can overcome future workplace challenges through technology, design, and community.