

Cybersecurity Awareness Training Simulator

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Abstract:

In response to the escalating cybersecurity challenges worldwide, this project introduces an innovative solution using virtual reality to educate individuals on mitigating the risk of cyberattacks.

The virtual reality simulation method offers a distinct advantage by closely mimicking real-life behaviors and scenarios. Through the development of an immersive virtual reality simulator for cybersecurity awareness training, this

project seeks to empower the general population to effectively respond to the growing number of cybersecurity threats (i.e., cyberthreats), increasing social systems' resilience to cyberattacks and cybercrime. Our goal is to create an immersive and ecologically realistic simulator experience for training cybersecurity behaviors, incorporating essential feedback within real-world scenarios. This feedback is crucial to foster participants' awareness on behaviors that may increase vulnerability to cyberattacks and to gain a comprehensive understanding of their role in preventing and fighting cyberthreats and cybercrime.

In this project, we combine cutting-edge virtual reality with an evidence-based approach to develop and validate an innovative virtual reality simulation training tool for promoting cybersecurity behaviors. We study its efficacy in changing attitudes towards cybersecurity and cyber risk behaviors through personalised instructions and feedback. This work can be used to engage individuals, communities, businesses, and governments, empowering them to follow more robust cybersecurity practices, and contributing to a safer digital landscape for all society.

Partners:

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Lisa Haddouk (consultant)