

Protecting Older Adults Online

This project will improve the resilience of older-adults towards cyber-security attacks by developing methods to communicate account security weaknesses and advising on appropriate protections, through novel visualizations.

Weak online account security is an issue with monumental consequences to both individuals and to greater society, older adults are seen as the most vulnerable generation to such attacks due to a general lack of security best practices and technological knowledge; we have yet to provide tailored account security information to older adults in an appropriate and understandable fashion in order to provide increased protection online.

We have three aims: -

1. To discover patterns and similarities within account ecosystems created by older adults.
2. To develop methods to better understand personal account ecosystems through novel intuitive approaches.
3. To establish techniques of communicating potential attack points in the personal account ecosystems along with realistic usable adjustments to protect against potentials attacks.

This project will explore novel ways of displaying personal account ecosystems in order to develop an understanding and awareness into how older adults are at risk online, indicating potential adjustments in order to protect online accounts

The research objectives are as follows: -

1. Create and perform a user study with older adults to collect information on personal account ecosystems and their approaches to online security in order to discover patterns and similarities within the older generation.
2. Design and develop an application that allows visualization of account ecosystems in order to create methods of displaying account ecosystem information in ways that are understandable to older adults.
3. Create methods to indicate critical weak points regarding security using the personal account ecosystem information in order to communicate where an adversary could attack and provide appropriate mitigations.

This work will contribute to creating an environment that supports older adults to defend and more importantly, provide independence to protect themselves from cyber-attacks compromising their account security.