

**KM2022 Conference**  
**Pre-Conference Industry Day**  
**Wednesday, 29 June 2022, University of Maribor,**  
**Faculty of Criminal Justice and Security, Ljubljana, Slovenia**  
**Themes: Knowledge Management, Cybersecurity, Learning, and Information Technology**  
<https://iiakm.org/conference/>

### **Invited Talk**

**e@ser | Secure use of smart devices among the elderly: Towards education-based cybercrime prevention**

#### **Dr. Simon Vrhovec**

Head of the project, University of Maribor, Faculty of Criminal Justice and Security, Ljubljana, Slovenia

#### **Abstract:**

The population in Slovenia and the European region is steadily aging. New technologies may support the well-being and enrich the everyday lives of the elderly. Smart devices and systems, such as wearable and mobile medical devices, ambient assisted living technology, etc., are at the cutting edge of emerging technologies. The use of such devices inevitably results in an increased inclusion of the elderly in the cyberspace as smart devices are usually connected to a cloud account, mobile app or both. However, limited proficiency and fears about cybersecurity may hinder the adoption of smart devices by the elderly. The overall aim of project *e@ser* is to provide a comprehensive strategy for prevention of cybercrime related to the use of smart devices by the elderly based on cybersecurity training by generating the knowledge necessary to develop smart cybersecurity training that will enable the elderly to learn how to securely use smart devices and be adaptable to the varying needs of individuals. In this talk, we will report on a study identifying smart devices used by older adults in nursing homes in Slovenia and assesses their vulnerability. Results indicate that residents readily use only three types of smart devices. Smartphones and tablets are used individually, while smart TVs are commonly shared. Older adults in nursing homes are currently not highly vulnerable to cyberthreats since their devices are rarely connected to the internet however this may change in the future.

#### **About the Speaker:**

Simon Vrhovec received the Ph.D. degree in computer and information science from the University of Ljubljana, Ljubljana, Slovenia, in 2015. He is currently an Associate Professor at the University of Maribor, Faculty of Criminal Justice and Security, Ljubljana, Slovenia. His main research interests include human factors in cybersecurity, software security engineering, agile methods, and change management. He has been in the steering committee of the European Interdisciplinary Cybersecurity Conference (EICC), since 2019, and co-chaired the Central European Cybersecurity Conference (CECC), in 2018 and 2019. He is an Editorial Board Member of the Journal of Cyber Security and Mobility (JCSANDM), Frontiers in Computer Science, EUREKA: Social and Humanities, and International Journal of Cyber Forensics and Advanced Threat Investigations (CFATI). He serves or has served as a Guest Editor for IEEE Security & Privacy, Journal of Wireless Mobile Networks, Ubiquitous Computing, and Dependable Applications (JoWUA), and Journal of Universal Computer Science (J.UCS).

