



UCC Cyber Security Research Group

Cyber Ireland Conference 2022

**A TRADITION OF
INDEPENDENT
THINKING**



UCC

University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

UCC CyberSecurity Group – At a glance

- 3 permanent academic staff, over 20 researchers (PhD and PostDocs) all externally funded
- Active role in CONNECT, Insight, CRT-AI and ADVANCE
- Funded by Horizon Europe/2020, Science Foundation Ireland, Enterprise Ireland/DTIF, Irish Research Council, EPSRC, ...
- High international research profile:
 - Active collaborations with major research groups in Europe and beyond (Amsterdam, TU Darmstadt, Louvain, NTU Singapore, ...)
 - Prominent roles in security and privacy conferences and journals (IEEE EuroS&P, ...)
 - Research outputs regularly published in highest-ranked venues
- Extensive track record of industry collaborations (Meta, Collins, JLR, Sedicii, ...)

UCC CyberSecurity Group – PVASec

Science Foundation Ireland
Frontiers for the Future Award
Prof. Utz Roedig

Personal Voice Assistants (PVAs) such as Amazon Echo, Siri or Google Home are now commonplace and are increasingly used for interaction with phones, tablets, PCs and smart environments such as automated homes or cars. PVAs collect sensitive information such as conversations and sound cues and are used to access important computer systems requiring access control.

PVASec: Personal Voice Assistant Security and Privacy aims to advance our understanding of security and privacy issues in the PVA context.



UCC CyberSecurity Group – SECURED

European Union

Horizon Europe – Health Cluster

Dr. Paolo Palmieri

SECURED: Scaling Up Secure Processing, Anonymization and Generation of Health Data for EU Cross Border Innovation

SECURED will scale up multiparty computation, data anonymization and synthetic data generation, by increasing efficiency and improving security, with a focus on private and unbiased artificial intelligence and data analytics, health related data, and cross-border cooperation.

The project will address current limitations of secure multiparty computation and anonymization including: limited practical capabilities and performance; lack of standardized data anonymization for health data; complex and ad-hoc nature of current federation protocols for machine learning and AI-based data analytics; lack of support for health technology providers to implement privacy enhancing technologies, in particular SMEs.

