AGENCY
—
Assuring Citizen Agency in a World with Complex Online Harms

AGENCY is funded by UKRI/EPSRC in the programme:
Protecting Citizens Online

AGENCY is aligned with:
National Research Centre on Privacy, Harm Reduction and Adversarial Influence Online (REPHRAIN)
Presentation by:
Dr Cristina Neesham
Reader in Business Ethics & CSR
Newcastle University Business School

REPHRAIN Showcase Workshop
London, 19 January 2023
The research idea

1. **Complex Harms:**
   - Beyond victim/perpetrator mode
   - Intersectionality of attacks/harms
   - Caused by often unintended intricacies of living online

2. **Agency:**
   - Improve the control over online living for end users and their dependents
   - Being in control and/or feeling in control

**Research Hypothesis:**

Citizen agency protects against complex harms
People and Areas: Citizen-Oriented Design

Vasilis Vlachokyriakos
(Ncl CS) Interaction Design, Co-Design, HCI

Abigail Durrant (Ncl CS)
Interaction Design, Co-Design, HCI

Kovila Coopamootoo
(King’s CS) Human Aspects of Security, HCI, Privacy

Deborah Chambers
(Ncl Arts & Cultures) Media, Communications, Smart Homes

Maryam Mehrnezhad
(Royal Holloway CS) IoT, Security, Female Technologies

Citizen-Oriented Design

3 Postdocs, 1 PhD student in this strand
- Shola Olabode, PDRA, Newcastle Arts & Cultures
People and Areas: Decentralised Tech

Aad van Moorsel  
(B’ham CS) DeFi, Decentralised ID, Verifiable Credentials

Ehsan Toreini (Durham CS)  
Zero-Knowledge, Crypto-Economic mechanisms

Maryam Mehrnezhad  
(Royal Holloway CS) IoT, Security, Female Technologies

Lei Shi (Durham CS)  
Human-AI Interaction, Personalisation, Gamification

Stamos Katsigiannis  
(D’ham CS) Applied machine learning, anomaly detection

3 Postdocs in this strand  
- Han Wu, PDRA, Newcastle/Birmingham CS
People and Areas: Society & Policy

Ben Farrand (Ncl Law)
Technology and Law, Policy

Karen Elliott
(B’ham Business School)
FinTech, Corporate Digital Responsibility

Cristina Neesham
(Ncl Business School) Business Ethics

Julian Williams
(Durham Business School) Finance, Economics of Privacy/Security

Deborah Chambers
(Ncl Arts & Cultures) Media, Communications, Smart Homes

3 Postdocs and 1 PhD student in this strand
- Karolina Markeviciute, PhD student, Durham Business School
- Jehana Copilah-Ali, PDRA, Ncl Bus. School
Advisory Board

Petra Saskia Bayerl
Professor of Digital Communication and Security, Sheffield Hallam University

Mark Coté
Reader in Data and Society, King’s College London

Rose Gilroy
Professor of Ageing Policy and Planning, Newcastle University

Phil Jackman
North East Initiative on Business Ethics (NIBE)
Collaborating: Case Studies

Participate in research scoping workshop(s):

Female Health Tech

Disinformation

Smart Homes

Identity Management

With partners including:
Swiss Precision Diagnostics, BBC, Atom Bank, Active Building Consortium, Future Homes Alliance, Yoti, Angelou Centre, Citizen Advice Northumberland
Smart Homes Workshop

Newcastle, 18 November 2022

1. PI’s Introduction to 'complex online harms' (Aad van Morsel)

2. Introducing Smart Home:
   - Meaning of ‘smart home’: Research concepts, values, visions for the future (Deborah Chambers, Shola Olabode)
   - Accounting for complex harms (all-group discussion)

3. Citizen-centricity in smart home research:
   - Principles of ‘citizenship’, ‘being’ and ‘agency’: shaping our agenda and methods (Vasilis Vlachokyriakos, Abi Durrant)
   - Privacy and security for smart home harm reduction: scope and limits (Kovila Coopamootoo, Maryam Mehrnezhad, Toreini Ehsan)

4. Data collection methods:
   - Human-centred Methods. Exploring citizen-centred and co-creation/ co-design with multiple stakeholders (Abi Durrant, Viana Zhang, Vasilis Vlachokyriakos, Maxim Kolomeets, Lei Shi)

5. From design to implementation:
   - Types of "tech data" used for smart home intrusion detection. Connections with state-of-the-art smart home technology design/development (Stamos Katsigiannis, Aad van Moorsel, Toreini Ehsan)

6. Legal and ethical dimensions of soft law:
   - Stakeholder Engagement (Rose Gilroy, Future Homes Alliance)
   - Devising an informed strategy to embed smart home agency in law and policy (Ben Farrand, Karen Elliot, Rebecca Owens)
   - Ethics by design and technical research agendas (Kovila Coopamootoo)

7. Privacy decision-making and cost-benefit analysis:
   - Balancing multi-stakeholder concerns in agentic SHT design (Julian Williams, Karolina Markeviciute, Aad van Morsel, Karen Elliott)

8. Corporate Digital Responsibility & Responsible Innovation:
   - How the smart home industry can address and realise their responsibilities (Cristina Neesham)
   - Transition from Corporate Digital Responsibility to Responsible Innovation: ethical procedures, behaviours, culture (Karen Elliott, Jehana Copilah-Ali)
   - Responsible innovation: key principles (Cristina Neesham)

9. Wider Discussion: Intended outputs and next steps to inform the AGENCY programme
Responsible Research & Innovation (RRI) Framework

(After Stilgoe et al, 2013)

**FOR POLICY DEVELOPMENT – KEY PRINCIPLES:**

**Inclusiveness:** Relevant stakeholders, and their values and needs, should be included in the process of technological innovation from the start.

**Anticipation:** Impacts, benefits and risks of the technology should be anticipated, and these anticipations should be fed back into the process of technological innovation.

**Reflexivity:** The underlying purposes, motivations, and values for technological innovations should be reflected upon and should guide the process of technological innovation.

**Responsiveness** Technological developments should be responsive to the values and needs of society and to new insights and developments that appear along the way.
Best wishes from the AGENCY Project team: researchers from law, design, architecture, computer science, ethics, business, AI and HCI
Thank you for your attention.

Any questions?