The SL Outlook and Coverage

Security is NOT Just a Technology Issue – It’s a “Systems” Issue!

- SL targets multi-disciplinary socio-technical approaches for “useful and usable” security with the Socio-technical Systems Security Hub (SSS-H)
- SL advocates a data-centric End-to-End system’s security outlook holistically covering multiple application domains and technologies.
- SL provides community-shared threat repositories & testbeds to facilitate collaborations and exchange with Academia, Industry, Govt, SME’s with the Threat Intelligences Data Exchange Hub (TIDE-H)
- SL is supported by the ACE-CSR & CREST Centers

SL’s Application Domains (Current & Evolving)

- CIP - Banking, Industrial Control Systems, Transport, Energy
- Societal - Child Abuse, Violence, Behavioral Mores, Privacy
- Defense - Terrorism, Crime, War
- Health - Technology Assisted Living, Health Data/Genomics Privacy
- AV, Adaptive Sec, Resilient Data, Analytics/ML - Autonomous Systems, Security Quantification, Security Composition, Data Integrity
Security Lancaster

SL Research Areas & Centres

- Centres: Data-Centric SSS-H (Socio-Technical “Systems” Security Hub)
- CREST (centre for research and evidence on Security Threats)
- ACE-CSR (Academic Centre of Excellence in Cyber Security Research)

Technical Research Areas
- Software
- Distributed Systems
- Systems Security
- Networks
- Digital Forensics

Social Research Areas
- Societal Threats,
- Behavioral Science,
- Sociology, Privacy
- Law, Policy, Ethics

[Diagram of the Security Research Areas and Centres]
Security Lancaster

LANC TIDE-H: Lancaster’s ‘Threat Intelligence Data Exchange’ Hub

Academia
Threats Dataset Repository for Academic Collaborations (IDID, h-UNIQUE, ICS, OS Network, Social...)

Industry
Anonymized Sharing of Attacks & Threat Patterns (Banks, CIP...)

Government
Repository for Threat profiles, Health DBs...(Police, GCHQ + Intl, NHS...)

Virtual Labs
Incubator Env. Tools/Testbeds/IPR/Best Practices...

Synergy
Data Sciences Institute, Secure Digitalization (secured @UEZ), Lancaster Technology Accelerator, Manchester/Lancashire CyberFoundry, Health Innovation Campus, Eden, EC CONCORDIA...

The SL Outreach Approach – Inform, Engage, Lead

- **Academic Information Days**: Exposure of our research areas portfolio. Events on topical and emergent areas & road mapping to develop research cooperation clusters.
- **Industry Information Days**: Engagement for research, collaboration and technology transfer. Support for business incubation.
- **Policy/Funding Information Days**: Awareness, exposure, road mapping
- **Community Information Days**: Social outreach, exposure and awareness building for general public, school STEM programs and university-bound students to “research + educational + societal” aspects of Cyber Security.