

Security Lancaster

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***

SL’s Application Domains (Current & Evolving)

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

Security Lancaster

SL Research Areas & Centres

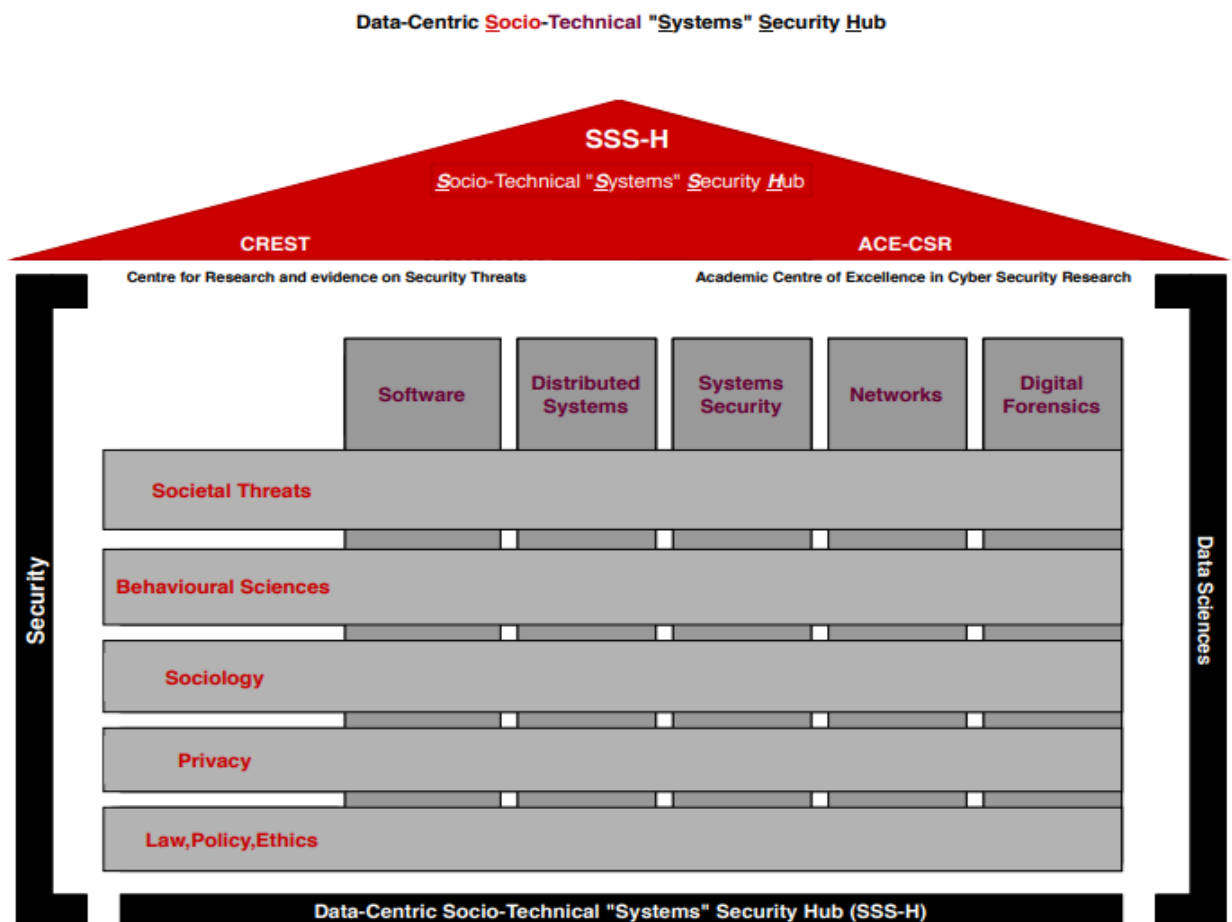
- Centres: Data-Centric **SSS-H** (**S**ocio-**T**echnical "**S**ystems" **S**ecurity **H**ub)
- **CREST** (centre for research and evidence on Security Threats)
- **ACE-CSR** (**A**cademic **C**entre of Excellence in **C**yber **S**ecurity **R**esearch.

Technical Research Areas

- Software
- Distributed Systems
- Systems Security
- Networks
- Digital Forensics

Social Research Areas

- Societal Threats,
- Behavioral Science,
- Sociology, Privacy
- Law, Policy, Ethics



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

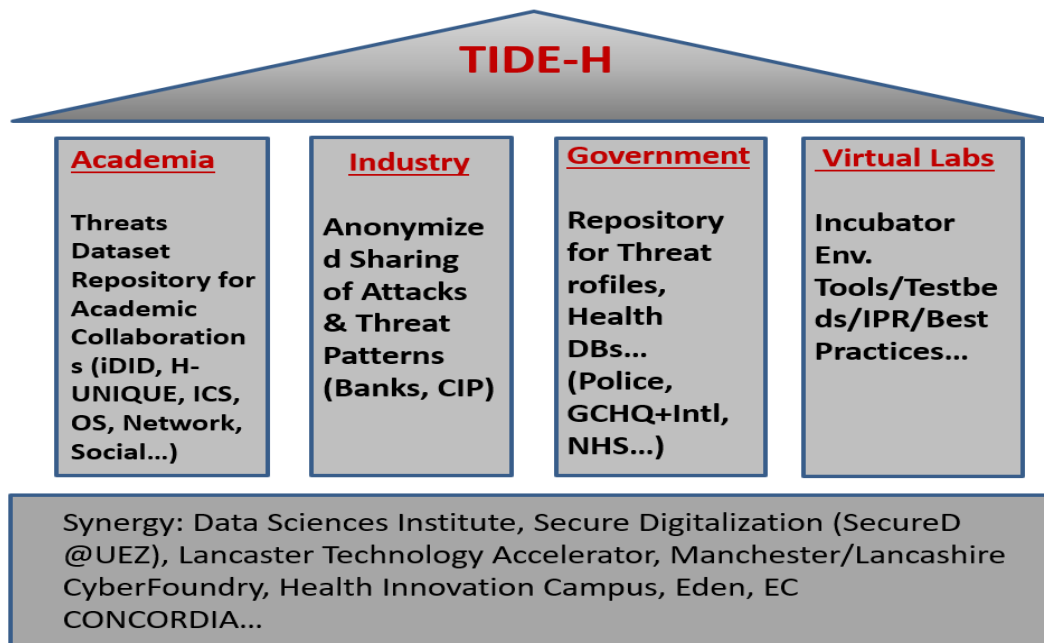
Repository for Threat profiles, Health DBs...(Police, GCHQ + Intl, NHS...)

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.