Strathclyde Cybersecurity Group

https://www.strath.ac.uk/research/strathclydesecurityresearchgroup/

University of Strathclyde Glasgow

About Us

The cybersecurity group spans across a range of disciplines, including:

- Computer and Information Sciences
- Governance and Public Policy
- Statistics
- Engineering
- Management Science
- Law
- Sociology

The group is internationally recognised for its systems focus that bridges systems security, behavioural and legal aspects of cybersecurity research.

The permanent members of staff in the group are supported by 5 postdoctoral research associates, and a thriving PhD programme consisting of 23 students in the areas of technical and socio-technical security, and cyber law.

An MSc in Cybersecurity is in its planning stages

Strategy and Vision

Our vision is to provide world-class multi-disciplinary research, that provides the evidence based on which we jointly seek to improve the security of today's society. Our strategy is as follows:

- Cybersecurity research spanning science, engineering, business and the social sciences
- **Intersectorality** drawing on leading academics across faculties, industry and third sector organisations (e.g. health providers, local government, armed forces, etc.)
- The scale of its intended **impact** is based upon 75 companies who are already part of the Strathclyde Knowledge Exchange ecosystem
- Focus on delivering **end-to-end** solutions, including a strong focus on the legal, ethical and regulatory frameworks governing the use of cybersecurity
- Provide world-class **training** for all security specialists who will, in turn, be able to address security from a holistic perspective, drawing on a range of disciplinary insights

Key Projects

Following our key areas of research, and coinciding with the group's strategy and vision, they key projects undertaken within the security group include:

- **Cyber-Physical Systems Security**
  UKERI-DST – £220,000
  2019 to 2021

- **Cybersecurity iCASE Studentships**
  EPSRC-NPL – £180,000
  2019 to 2023

- **5G RuralFirst Testbed**
  DCMS – £450,000 – 2018 to 2019

- **Robustness-as-evolvability**
  EPSRC – £790,000 – 2015 to 2019

- **SFC Interface Programme**
  £104,799 – 2015 to 2018

- **MoE Cybersecurity Research Studentships Award**
  University of Strathclyde – £673,000
  2014 to 2022

- **Standardised Security Evaluation Testbed**
  GCHQ – £210,000 – 2014 to 2016

- **Data Provenance Solutions for IoT**
  KTP – £136,782 – 2014 to 2016

- **Secure High Availability Avionics Wireless Networks (SHAWN)**
  Technology Strategy Board
  £162,724 – 2014 to 2016

- **Social Networks**
  DSTL – £100,000 - 2012

- **Botnet Detection via Structured Graph Analysis**
  DARPA – $155,000 – 2010 to 2012

- **Resource Static Analysis**
  EPSRC – £101,255 – 2009 to 2010

- **Mobile VCE Flexible Networks Programme**
  EPSRC – £207,542 – 2009

- **Botnet Detection and Mitigation**
  DARPA-I3P – $150,000
  2018 to 2019

Industry and Academic Links

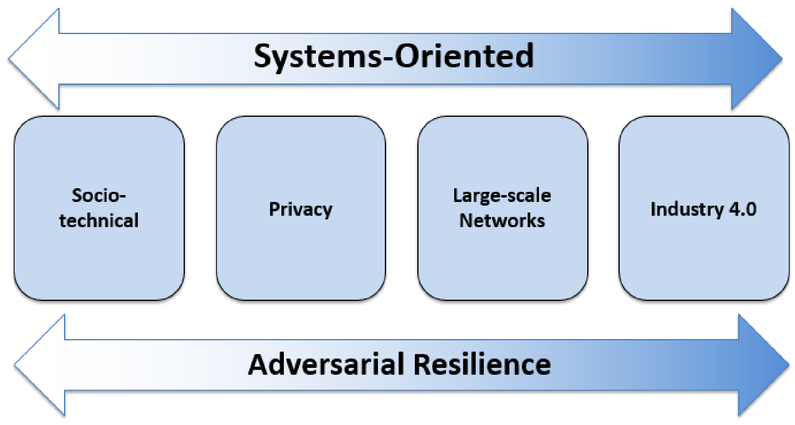
Our research group is connected with a wide variety of industry, government and academic links, including:

- **Industry** – IBM, Google, Microsoft, Samsung, VMWare, Thales, Airbus, Brocade, Juniper and Keysight
- **Government** – NPL, Police Scotland, SIPR (MoD, DSTL, Interpol, FBI, Department of Homeland Security, Cabinet Office)

We have received £3.88M in research grants in the last ten years, funded by EPSRC, ESRC, EC, DSTL, CPNI and MoD.

Our partnerships and connections with major (international) academic links include:

- University of Illinois, Urbana-Champaign, USA
- Simon Fraser University, Canada
- OTH-AMS
- Indian Institute of Science, Bangalore, India



Facilities

Our research group consists of a multitude of exceptional research facilities, including:

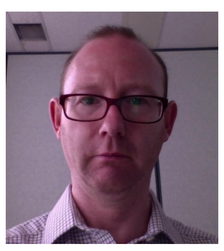
- **MSc Lab** (Teaching)
- **SDN Testbed** – Experimental Network ArChitectures Testbed (ENACT)
- **Malware Testbed** – Ransom Architectures for Network and System Opportunistic Malware (RANSOM)
- **Electricity Grid Testbed** – Power Network Demonstration Centre (PNDC) Testbed
- **General Networking Labs**
- **HPC Facilities**

Shishir Nagaraja
Reader

Sotirios Terzis
Lecturer

George Weir
Lecturer

James Irvine
Reader



Robert Atkinson
Senior Lecturer

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Edited by R K Shah and S Nagaraja