

University College London

Academic Centre of Excellence in Cyber Security Research

Prof. Emiliano De Cristofaro, Director

https://www.ucl.ac.uk/cybersecurity-centre-of-excellence/



What are ACE-CSRs?

Recognition of world-class research in the field of cyber security by NCSC and EPSRC

Scheme encouraging collaboration across 19 centres

Enhancing the UK's knowledge base providing top-quality graduate training

Supporting NCSC and driving up the level of innovation



What we do /1

- Publications at top-tier conferences
 - UCL #10 in Europe on csrankings.org
- Contribute to standards
- Release open source code
- Serve in government advisory boards and NGOs
- Lots of collaborations with industry
 - Microsoft, Intel, Google, Cisco, HP, IBM, BT, O2, National Grid, G4S, SAS, McAfee, BAE, Thales, NortonLifeLock, Telefonica, Amazon, Nokia etc.



What we do /2

- Commercialisation, Spin-offs
 - E.g., ChainSpace!
- Get research funding!
 - UKRI, EU, EPSRC, NCSC, etc.
 - Founding Partner of REPHRAIN
- Education
 - 2nd Year UG module on Security
 - MSc in Information Security (NCSC Certified)
 - Supervise PhD students and PostDocs
 - Centre for Doctoral Training in Cybersecurity

Information Security Research Group



Madeline Carr
Global Politics and
Cyber Security



George DanezisPrivacy Technologies,
Blockchains



Emiliano De Cristofaro Privacy Technologies, Trustworthy ML, Online Harms



Lorenzo
Cavallaro
Systems Security,
Trustworthy ML



Marie Vasek Security Economics, Cybercrime



Information Security Research Group



Angela Sasse
Human and
organisational aspects
of security



Philipp JovanovicCryptography, Blockchains,
Privacy



Steven Murdoch
Authentication, banking security, anonymous communications



Sarah Meiklejohn
Cryptography, computer security, anonymity, and cryptocurrencies



Systems and Networks Research Group



Mark Handley Secure network protocols, DoS, secure routing



Brad KarpSystems Security



Centre for Research on Evolution, Search and Testing



Earl Barr
Malware
detection,
deobfuscation



David Clark
Flow security of software,
malware detection, testing of
software



Jens Krinke
Program analysis,
code provenance,
clone detection



Programming Principles, Logic and Verification Research Group



Byron Cook
Automatic program
verification and
analysis



David Pym
Security management,
economics of information
security



Dept. of Science, Technology, Engineering and Public Policy



Irina Brass
Economic and social
regulation of disruptive
technologies, cyber security
and data protection of IoT



Leonie Tanczer
Technology, security and gender, (in)security of hacking and hacktivism



Dept. of Security and Crime Science



Shane Johnson Future Crimes



Ingolf Becker
Cybercrime, Organisational
Cyber Security



Enrico Mariconti Malware, Cybercrime



Additional members



Shi Zhou
Dept. of Computer Science
Internet topology and routing; epidemic spreading, cloud
computing classification, social media analysis, network security



Mirco Musolesi
Dept. of Computer Science
Data science, sensing, modelling, human behaviour and dynamics, cyber security and privacy



Agenda

- 14:30 Trustworthy Al... for System Security *Prof. Lorenzo Cavallaro (UCL)*
- 15:15 Coffee Break
- 15:30 Panel: Online Safety Bill -- Challenges and Opportunities Moderated by Prof. Steven Murdoch (UCL)
- 16:30 Prospects and Pitfalls for Machine Learning in Software Security *Prof. Brendan Dolan-Govitt (New York University)*



Housekeeping

Please wear a mask!

gcwifi / pineberry44

If you're streaming, please use sli.do for questions



https://app.sli.do/event/pWi6SC1dygWVQSk XqKUaVN

Event code: #3883328