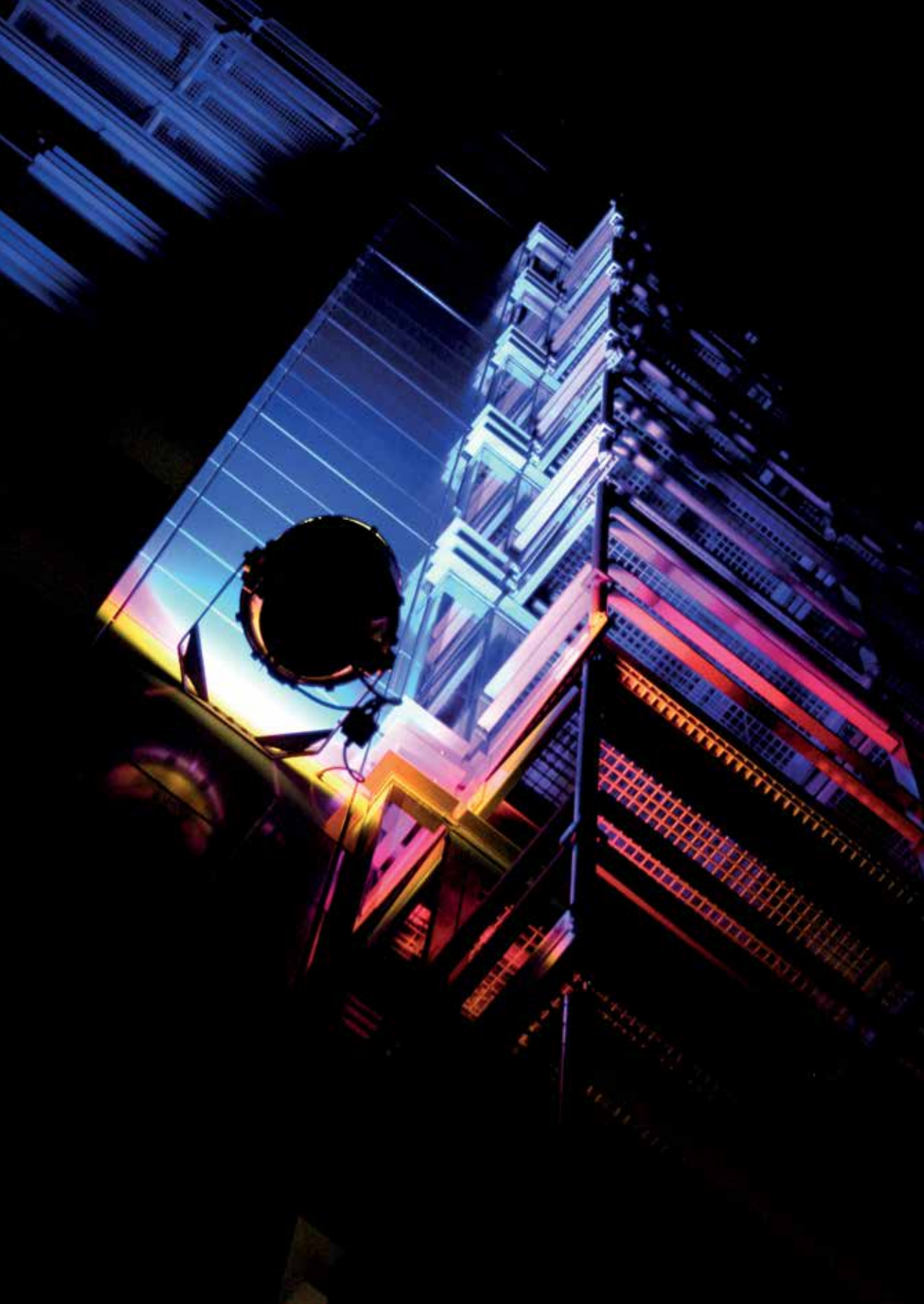


UNIVERSITY OF  
**Southampton**

Advancing  
cyber security.  
Cyber Security Academy





# An industry/University partnership to advance cyber security through world class research, teaching excellence, industrial expertise and training capacity.

We are working with our partners developing a dynamic technopole based in the South of England delivering global impact:

## Research

World class, strategic project work contributing to a more secure cyberspace

## Cyberspace Innovation

Applying research to provide solutions to real cyber security problems

## Education

Delivering the next generations of cyber security professionals

## Training

Keeping experienced professionals current and cyber security aware

## Outreach

Ensuring schools and community engage in best cyber security practice

## Partnership

We operate a tiered membership scheme enabling engagement for companies of all sizes. This, coupled with a policy of involving companies from across the spectrum of industrial sectors, ensures that the whole industrial and commercial community is included.

Members of the Academy benefit from a multi-million pound shared research programme, consultancy from globally respected experts, access to educational programmes from a world-class university, recruitment and placement opportunities and CPD training for professionals and IT operatives.

Companies are invited to join the Academy at the most appropriate level to their needs and means. We are delighted that we have already established partnerships with DSTL, Northrop Grumman and Roke Manor Research as our founding core members.

## Core partners

UNIVERSITY OF  
**Southampton**



[dstl]

**NORTHROP GRUMMAN**

**Roke**

Part of the  
Chemring Group

Part of CyberInvest



HM Government



“These Centres of Excellence form the backbone of the UK’s world leading cyber security research. It is crucial for academia to work closely with industry and ensure the UK benefits fully from this knowledge and expertise on cyber security.”

**Rt Hon David Willets MP**

speaking as Minister for Universities and Science Department for Business, Innovation and Skills

# The Cyber Security Academy is a focal point of expertise and will become the hub of a vibrant community of high value companies and institutions.

Driving innovation and delivering significant value, the academy is nationally recognised and will exercise global influence. World-class academic staff engaged in research, teaching, training, outreach and consultancy are supported by a professional team focusing on innovation, technology transfer, and opportunities with industry.

The Cyber Security Academy is based at the Academic Centre of Excellence for Research in Cyber Security (ACE-CSR) at the University of Southampton and provides a vibrant and innovative environment for member companies.

Academic staff members and postdoctoral researchers will work interactively with members on agreed research themes in a shared research consortium scheme. A doctoral training centre is planned with a substantial annual intake of PhD students.

## Cyber Security Academy



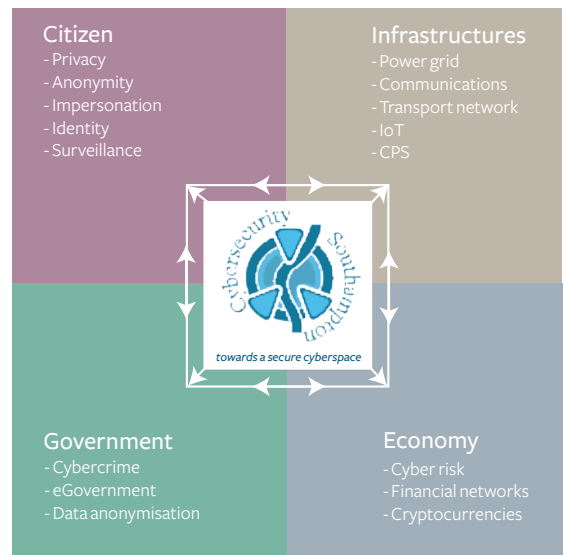
The Academy will provide a stream of cyber security professionals at all levels of qualification; will train the existing workforce through an industry-relevant CPD program in Cyber Security and will promote public engagement and schools outreach.

Policy and direction is set by the Strategy Board which is the highest governance body in the Academy. All

core members have a seat on this board ensuring full involvement in the direction of research and the overall strategy of the Academy.

An external Advisory Board will connect the Academy to its government, economy industry and society stakeholders, act as an advocate for it, and regularly review its activities.

Contact us today to join the Cyber Security Academy or request more information.



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# Our work

## Secure Federated Data Clouds

The H2o2o SUNFISH Project (£4.5m) partners include the UK and Italian governments. SUNFISH focusses on the secure sharing of information in federated heterogeneous private clouds, and aims at developing the middleware to federate data clouds belonging to different public sector entities whilst maintaining the required security levels.

## UK Government

Working with the government to investigate the cyber security of the Internet-of-Things, of the UK Smart Metering Implementation Programme as well as the effectiveness of cyber security essential controls. We have established solid working relationships with several agencies including the Foreign and Commonwealth Office, the Information Commissioner's Office, the National Audit Office and the National Crime Agency. We ideated and promoted a series of workshops and the Southampton Cybercrime Symposium to provide the first common forum between cyber law enforcement, the College of Policing and academia.

## Human-agent collectives

The ORCHID project (£5.5m) seeks to understand, build, and apply human-agent collectives to symbiotically interleave human and computer systems with a view to realising our tremendous potential whilst avoiding the pitfalls that come with dependence.

## Open linked data

The Open Date Institute (£10m) catalyses the evolution of open data culture to create economic, environmental, and social value. Among other things, it investigates privacy and anonymisation of open linked data.

## Software Verification and validation

Verification and validation in cyberspace research has delivered the ADVANCE project is developing a unified tool-based framework for automated formal verification and validation of cyber-physical systems.

## Many-core technology

The PRiME project (£5.6M) focuses on many-core technology and its profound implications on the energy efficiency, dependability and reliability of future embedded systems.

## Risk management strategy

We were awarded a 'Certificate of Excellence' by TSB for developing real-time models to strengthen risk management strategy, a project with London Capital Group.

## Provenance

Our research on provenance research is thriving and opening up in new directions, including provenance anonymisation, summarisation and analytics, with services being exposed to the community through the University's portal.

## Key areas of expertise and specialism

Our core research expertise includes: analysis and design of trustworthy software; bio- and cyber-metrics; cyber identity; cyber risk analysis; cyber criminology; data privacy; international cyber law; provenance and trust; safety- and-security by design; secure embedded systems; secure web technologies; security of cyber-physical systems and internet-of-things; security of critical infrastructures, transport networks, and power grid.



