

ARIANNA SCHULER SCOTT, DPHIL

Department of Management, Virginia Tech, USA
arianna [at] vt.edu

Current role[®]: Senior Associate Director, Integrated Security Education and Research Center (Administrative/Professional faculty) at Virginia Tech.

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Education

DPhil in Cyber Security (2022)

University of Oxford, UK

BSc (First Class Hons) Network Computing (2016)

Oxford Brookes University, UK

Research activities

Cyber security; information security; data protection; data control; privacy; user engagement; security culture.

Research applications

Digital engagement; digital platform service intervention; stakeholder engagement; software development; interdisciplinary research; mixed methods; design science; change management.

Journal articles

- Axon, L., Fletcher, K., Schuler Scott, A., Stolz, M., Hannigan, R., El Kaafarani, A., Goldsmith, M. & Creese, S. (2021). Emerging Cybersecurity Capability Gaps in the Industrial Internet of Things: Overview and Research Agenda. *Digital Threats: Research and Practice*.[▣]
- James, T. L., Ziegelmayr, J. L., Schuler Scott, A., & Fox, G. (2021). A Multiple-Motive Heuristic-Systematic Model for Examining How Users Process Android Data and Service Access Notifications. *ACM SIGMIS Database: the DATABASE for Advances in Information Systems*, 52(1), 91-122.[▣]

Conference proceedings

- Schuler Scott, A., Goldsmith, M., Teare, H., Webb, H., & Creese, S. (2019). Why We Trust Dynamic Consent to Deliver on Privacy. In *IFIP International Conference on Trust Management* (pp. 28-38). Springer, Cham.[▣]
- Schuler Scott, A., Goldsmith, M., & Teare, H. (2018). Wider research applications of dynamic consent. In *IFIP International Summer School on Privacy and Identity Management* (pp. 114-120). Springer, Cham.[▣]

Book chapters

- Winfield, A. F., van Maris, A., Winkle, K., Jirotko, M., Salvini, P., Webb, H., Schuler Scott, A., Freeman, J. L., Kunze, L., Slovak, P. & Theofanopoulou, N. (2022). Ethical Risk Assessment for Social Robots: Case Studies in Smart Robot Toys. In *Towards Trustworthy Artificial Intelligent Systems* (pp. 61-76). Springer, Cham.[▣]

Invited talks

Cyber VT ransomware exercise: real-time response and resilience for cyber security (Jan 2023)[▣]

A 2-hour workshop with cybersecurity club students exploring careers and incident response skills.

Singing a New Tune: Information Security as a Strategic Concern (2022)

A 15-minute talk describing a work in progress paper, seeking peer input. Co-presented with a fellow author.

Internet and Tech Law Committee - What is the Metaverse? (March 2022)[▣]

A panel discussion exploring the practicalities of regulating the Metaverse. An exploration of technical, economic and legal impact.

Designing responsible, participatory research (May 2020)

A 15-minute talk to postgraduate students providing an overview of how to practically apply responsible innovation and participatory methods.

Linacre Lecture: I've been forced to sign this & I'm not happy (Nov 2019)[▣]

A 20-minute talk addressing the recent upheaval in European data-handling and its impact on privacy awareness.

Protecting ourselves online: Why we shouldn't take cookies from strangers (Oct 2019)

A 20-minute public engagement talk and discussion charting the history of the Internet, and the development of data-use and institutional responsibilities.

Teaching

University of Oxford, Department of Computer Science: curriculum development

Computers in Society (Jan - Mar 2022)

I co-lead this course, focusing on the role of computing technologies in contemporary society. It combined social theory with case studies and interactive discussions.

Protecting User Data as a Software Developer (Jul 2020 - Mar 2021)

I designed and delivered this 2-hour class online. It was part of the syllabus for an access to higher education summer school, and I ran this twice internally due to popular demand.

Cybersecurity in Context (Mar 2019)

I designed and delivered this 4-day class in-person using capture-the-flag exercises, case studies and interactive discussions. Crafted as part of a syllabus for first-year PhD students.

Cyber Crisis Simulator (Feb 2017 - 2018)

I designed and delivered this 2-day class in-person to show the importance of knowledge sharing in crisis situations. I created the activity when I founded the UK's first multi-disciplinary cyber strategy competition, tailoring it to a syllabus for first-year PhD students.

University of Oxford, Department of Computer Science: teaching assistant

Computers in Society (Jan - Mar 2021; 2020)

I taught classes and graded assignments in physical (2020) and online (2021) environments.

Topics covered: online behaviour; Internet governance; machine learning bias; autonomous systems; AI; cyber security; social, ethical, legal and policy considerations; responsibilities of computing professionals; individual rights; the role of governance and regulation, and what ethical computer science looks like in practice.

Computer Security (Oct - Dec 2020)

I graded assignments and provided feedback to students.

Topics covered: fundamental principles of computer security; information security; access control, symmetric and asymmetric block ciphers, keyed

hashes, digital signatures, and simple key exchange protocols; security architecture; risk controls; operational environments.

Computer Networks (Apr - Jun 2020; 2019)

I taught classes and lab activities, graded assignments and provided feedback to students.

Topics covered: core theory of Computer Networks; basic architectural principles; networking stack (OSI layers); IP; routing; the Internet today; virtualisation; trust; security.

Awards

Best Poster Prize (Jan 2021)

Research hub showcase: Security, Privacy, Identity and Trust in the Digital Economy (SPRITE+)[▣]

Reviewing experience

- International Conference on Information Systems (2020; 2021)[▣]
- Internal curriculum review for Centre for Doctoral Training in Cyber Security (2017)

Committee experience

University of Oxford, Centre for Doctoral Training in Cyber Security

- Advisory board, Student representative (2016 - 2021)
- Yearbook editing committee (2016 - 2021)
- Annual student conference for Centres for Doctoral Training in Cyber Security, Autonomous Intelligent Machines and Health Data Science (Feb 2021)
- Annual student conference for Centres for Doctoral Training in Cyber Security (2017 - 2020)

University of Oxford, Department of Computer Science

- Joint Consultative Committee for Graduates (2016 - 2021)
- 'Human-Centred Computing' research theme member (2018 - 2021)

University of Oxford, University College

- Admissions panel member (Oct - Dec 2020)

University of Oxford, Mathematical, Physical and Life Sciences Division

- Student Representative (2016 - 2017)

Research experience

Department of Computer Science, University of Oxford

Research assistant, Developing Responsible Robots for the Digital Economy (Dec 2020 - Mar 2021)[▣]

- I was hired as a specialist in Responsible Innovation. I put together the application for ethical approval and analysed video data recorded during online workshops.

Research assistant, Foresight review of Cyber Security for the Industrial IoT (Jun - Nov 2020)²

- I supported workshops with industry, policy-makers and academics in Singapore, San Francisco and London, collecting and collating data, then drafting a final report.

Workshop scribe, 100+ Brilliant Women in AI and Ethics Conference (Sep 2019)²

- Responsible for note-taking, collation and the final report on “Data and decision-making”.

Research assistant, LabHack Zimbabwe (Jun - Aug 2018)²

- I developed materials to support an [ethical hackathon](#) to improve student research and development capacity. The Harare Institute of Technology, Zimbabwe hosted the event.

Research Institute for Sociotechnical Cyber Security², University College London

- Workshop scribe, Secure Development Practices Workshop (Nov 2020).