

Profile

Dr Arabo is a Senior Lecturer in Computer Networks and Mobile Technology at the University of the West of England. Dr Arabo is a reviewer for EPSRC, British Council and Newton grants/proposal applications. Dr Arabo is a recipient of the “Most Dedicated Cyber Professional development Educator (UK)” from the AI 2020 cyber–Security Awards, identified as Staff performing above expectation in his current role and inducted into the UWE Black Hall of Fame. Dr Arabo is also a nominee for the NFT awards 2022 (waiting for the outcome). Dr Arabo has successfully led the development of an MSc Cyber Security which has been fully certified by the National Cyber Security Centre UK (NCSC), the public-facing body of the GCHQ. Served as a faculty member of Oxford Internet Institute (OII) and was also a member of the Oxford University Cyber Security Centre. In the past, he was employed as a Cyber Security consultant by BT and a Research Fellow at the University of Oxford where he leads research on the security of connected home futures. Over 10 years of experience in research and development, teaching, and consultancy roles within the field of Network Security, Security of System-of-Systems composition, Mobile ad-hoc networks, ubiquitous computing, Cyber Security, Smart Device Security, and Identity Management. He is a Senior Fellow of the Higher Education Academy (SFHEA). Dr Arabo has also completed the Professional Development Course for External Examiner by the AdvancedHE. He has been a primary investigator (i.e., Grant number EPSRC 989908) and co-investigator on various research projects such as Webinos (FP7-ICT-2009-5) and served and still serves as a reviewer on conference technical programme committees, and journal editorials and has also published a book.

Academic Work Experience

2013 - date	The University of the West of England	Overseas quality and delivery of modules and programmes. Ensures academic integrity and quality assurance across all modules and programmes and portfolios within the department. Work in conjunction with industrial links to maintain academic alignment and a work-based curriculum. Created and leads various initiatives including research groups, outreach activities and programme developments. Led BSc (Hons) Enterprise Computing, led the development of MSc Cyber Security; Actively involved in both teaching, research, KE and outreach activities and initiatives. Managers research grants and employees within funded projects as well as mentor other staff. Led the inception, development and internal and external validation of MSc Cybersecurity as well as internal and external panel membership for programme validations. Development, maintaining and management of both industrial and academic partnerships within and outside the UK. Academic personal tutor, with a focus on student retention, attendant, engagement, and inclusivity.
2021- date	WMG Warwick	Sessional Tutor – MSc Cyber Security Engineering project supervision. Provides guidelines and quality research and delivery with the latest industrial context.
2021- date	NCC Education	Consultancy on content development for cloud virtualisation and security module, delivery, partnership development, accreditations etc. Leads the development of industrial certificate link portfolio to meet both academic and industrial needs, this is developed and delivered in partnership with UCLAN
2011 - 2013	British Telecommunications	Cyber Security Consultant, project leader with two teams (BT and Oxford) on Connected Home Futures, 3 IP's and publications. Developed and delivered industrials focus research with the depth of academic integrity and mentoring academic programmes within the project.

2011-2013 **Oxford Internet Institute, University of Oxford** Research Fellow researched connected home futures, where the project has investigated the emerging Cyber Security issues within future connected home and proposed solutions and prototypes, involved in supervising DPhil students within the project, and involved in EU project Webinos with 17 partners from industry and academia.

Panel Memberships and EE Role

2022-2022 **Nottingham Trent University** External Examiner for MSC Computer Systems and MSc IT Security

2012-2022 **Bradford University** External examiner on BSc and MSc Cyber Security degree programmes

July 2022 **BPP University** Validation Panel BSc(Hons) Data Science Degree Apprenticeship

Mar 2022 **New College Durham** Revalidation of my FdSc Cyber Security programme.

Mar 2022 **Internal UWE** New Programme -Special University Validation Panel – external partnership with Hong Kong

Jan 2022 **NCSC** Master Cyber Security certifications Assessment Panel

Jan 2022 **Internal – UWE** PGCAPP AL/AEL Panel

2017-2021 **Staffordshire University** External examiner on BSc and MSc degree programmes with the computer science department, covering network security and Cyber Security degree programmes

Education

2007-2011 **Liverpool John Moore’s University** PhD in Network Security Thesis: “User-Centred and Context-Aware Identity Management in MANets”
 2004-2007 **Swansea University** MEng (Hons) Computing

Esteem Contributions to Academic Activity and Service

2019-date **NCSC Certification Examiner and Contributor** Accesses application for degree certifications, certification of research centres as the centre of excellence etc.

2017-date **EPSRC, British Council and Newton** Grants/proposal reviewer for EPSRC, British Council and Newton grant applications

2015-date **ISACA** An academic representative of ISACA – Silver Membership

2017-date **PhD Examiner**

- External PhD Examiner “Collaborative Intrusion Detection In Federated Cloud Environments Using Dempster Shafer Theory of Evidence”
- Internal Examiner “Big Data Analytics' for Construction Firms Insolvency Prediction Models”
- External Examiner “Risk Homeostasis Methodology for Migrating Systems to the Cloud”
- Etc.

2014-date **Computing Reviews** Active reviewer of books, journal articles, videos, etc.

2008- Date	Journals/Conferences Session Chairing	Actively involved in reviews for IEEE, ACM, LNC conference, and journals, also chaired some conference sessions
2014 2016	- IoT Summit	Invited Speaker “Cybersecurity in IoT” in IoT Summit 2014 London Invited Speaker “IoT, Smart Cities/Homes, and Cyber Security” IoT Summit 2016 London

Selected Recent Projects/Grants

- **Primary Investigator (PI)** Strengthening Cyber Science Knowledge and Teaching from non-STEM perspectives for school pupils – Department for Digital, Culture, Media, and Sport– **Successful** - £41,102
- **Co-Investigator (CoI)** Mutual device authentication in Zero-trust Internet of Things – Department for Digital, Culture, Media, and Sport - **Successful** - £49,928
- **Primary Investigator (PI)** - G4G - LuJam: Measuring and Enhancing the Efficiency of Modern Cyber Security Tools – FET-CSC-18-002 – Research England – PI – **Successful** - £16,201
- **Primary Investigator (PI)** - G4G - JobisIT: Develop a tool for securing networks from a Ransomware attack- FET-CSC-18-006 – Research England – PI- **Successful** £16,743
- **Primary Investigator (PI)** - App collusion Detection and its Cybersecurity implications – UWE VC Early Career Research development Awards 15/16 – PI – **Successful** £10,000
- **Primary Investigator (PI)**- NFC Transactions Bypassing the Secure Element – **Technology Strategy Board** 2013-2015 £125,000 - **Successful**
- **Primary Investigator (PI)**- Cloud Security Framework **Innovation 4 Growth** 2014-2015 £156,000 - **Successful**
- **Primary Investigator (PI)**- “Connected Home Futures” Funded by **Oxford University and BT, BT Group** 2011-2013 £351,457 - **Successful**
- **Primary Investigator (PI)** - **EPRSC** award (989908) “Identity Management in Mobile Ad-hoc Networks (IMMANets)” 2007-2011 - **Successful** -£185,450
- **Co-Investigator** (Hosting PI team Member) - Webinos: Secure WebOS Application Delivery Environment an **EU FP 7** project with 20 partners from industry and academia EC FP7 2010 -2013. Co-I (Hosting PI team Member) - \$11m - **Successful**

Patents

- Arabo, A., F. El-Mousa, and T. Dimitrakos, Sandboxing User Access on Mobile Device, EU Filing numbers E01733 and E01733b. - **Granted**
- Arabo et al, Sandboxing Mobile Behaviour Based on running Environment, United Kingdom A32401 Issued February 2013 – **pending decision**

Selected Recent Papers

- Abubakar-Sadiq Shehu, Abdullahi Arabo et al, (2021 in Review) Self-Sovereign Identity Challenges and Values: A Review, Security and Communication Networks
- Pranggono, B and Arabo, A, (2021) COVID-19 Pandemic Cybersecurity Issues, Internet Technology Letters 4 (2), e247
- Arabo, A., Dijoux, R, Poulain, T, and Chevalier, G. (2019), Detecting Ransomware Using Process Behaviour Analysis, Procedia Computer Science, Elsevier (Accepted to Appear at the conference on November 2019)
- Mills, A., Arabo, A., and Ben-Dyke, A., “Case Study of Malware Behaviour: Relating to network Activity and use of DNS” IETF 105 Meet Montreal, 2019 – Presented at a Private Government Security agencies conf.
- Arabo, A, Salaun-Penquer J and Baco, S, “Securing the Cyber Ecosystem via the use of Intelligent Agents and SDN” IEEE Access [in review process]
- Arabo, A. and Serpell, M. (2019) [Pedagogical approach to effective cybersecurity teaching](#). In: Pan, Z., Cheok, A. D. and Mueller, W., eds. (2019) Transactions on Edutainment XV. Springer, pp. 129-140. ISBN 9783662593509 Available from <http://eprints.uwe.ac.uk/35458> '
- Xu, X., Chong, W., Li, S. and Arabo, A. (2018) [MIAEC: Missing data imputation based on the evidence chain](#). IEEE Access, 6. ISSN 2169-3536 Available from <http://eprints.uwe.ac.uk/34681> '
- Arabo, A. (2017). “CyberMix: A Roadmap of SDN-based Intelligent Cybersecurity Immune System” in 2nd International Conference on Cyber Warfare and Security (ICCWS 2017)