

I am an experienced researcher working in two important and increasingly complementary fields: distributed systems and computer networking. I am currently focusing on developing decision support for cloud infrastructures and novel network architectures, among other research topics. Both the EU and the EPSRC have funded my research, and I currently hold a total of £735K in research funding.

One of my top priorities is to produce high impact publications, and thus I have been consistently effective at publishing in top venues (over 1700 citations recorded on Google Scholar, h-index=18, i10-index=32), e.g. IMC (acceptance rate of 23%), IFIP Networking (25%), EuroS&P (18%), CloudCom (18%), ICWSM (19%), ASONAM (17%), MODELS (19%), ICDCS (19%), IEEE ToCC (impact factor of 5.967), ACM ToMM (2.870), and FGCS (5.768). Moreover, I am driven by real-world challenges and thus have been publishing in premier interdisciplinary venues such as EMS (impact factor of 4.552) and JEM (4.865). My research has received widespread media attention, with coverage from news outlets such as BBC, Times, Slashdot, Daily Mail, Science Daily, Naked Security, Business Standard, and Communications of the ACM. I see it as a duty and an honour to be actively involved in community activities and, as such, I serve on a number of editorial boards, TPCs and organising committees.

I also take great pride in having substantial teaching experience. My student feedback has consistently been outstanding for both undergraduate and postgraduate modules.

I have supervised 50+ undergraduate and MSc student projects, during which I engaged closely with the students with attention to detail and quality.

Education

- PhD (2011) in Network Measurement & Grid Computing, Lancaster University, UK.
Thesis: *Monitoring, Analysing and Predicting Network Performance in Grids*.
- MSc, with Distinction (2006) in Networking & Internet Systems, Lancaster University, UK.
Dissertation: *Message Propagation in Ad-hoc Wireless Networks*.
- BSc (2002) in Computer & Systems Engineering, Alexandria University, Egypt.
Dissertation: *Adaptable WAP Services*.

Teaching

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| 2018 – 2021 | Building Big Data Systems (MSc module) – mean student feedback 4.04 |
| 2016 – 2021 | Distributed Systems (3 rd year undergraduate module) – 4.18 |
| 2015 – 2018 | Fundamentals of Data Science (MSc module) – 3.91 |
| 2011 – 2012 | Advanced Distributed Systems (MSc module) |
| 2011 | Advanced Networking and the Internet (MSc module) |
| 2010 | Computer Science Innovation (seminar for 3 rd year undergraduates) |
| 2010 | Advanced Networking (guest lectures for 3 rd year undergraduates) |

Experience

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| Apr 2021 – present | Reader , School of Computing Science, University of Glasgow. |
| Jan 2018 – present | Visiting Professor , École de Technologie Supérieure Montreal. |
| Aug 2019 – Mar 2021 | Senior Lecturer (Associate Professor) , SCC, Lancaster University. |
| Oct 2015 – Jul 2019 | Lecturer (Assistant Professor) , SCC, Lancaster University. |
| Nov 2010 – Sept 2015 | Senior Research Associate , SCC, Lancaster University. Worked on EVOp (NERC) and FIC2 (FP7) projects. |
| Feb 2014 – Feb 2015 | Technical Consultant on the EVOKES project (NERC/BIS). |
| Nov 2006 – Jan 2010 | Research Assistant , Computing Department, Lancaster University. Worked on EC-GIN (FP6) project. |
| Sep 2005 – Sep 2006 | Network Surveillance Agent , Orange Business Services. |

Research Funding

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| <p>Apr 2018 – Dec 2021 Principal Investigator Total: £775,259 Held: £388,701</p> | <p><i>Adaptive Brokerage for the Cloud (ABC)</i> EPSRC grant on the selection of cloud services through the introduction of a smart and continuously adaptive cloud broker. <i>Collaborators:</i> University of St Andrews, Adobe, CEH, Satalia</p> |
| <p>Jan 2015 – Dec 2018 Co-Investigator Total: €1,032,221 Held: £341,850</p> | <p><i>Declarative and Interoperable Overlay Networks, Applications to Systems of Systems (Dionasys)</i> CHIST-ERA grant on abstracting the dynamic linking of heterogeneous network overlays using generative languages. <i>Collaborators:</i> Neuchatel (Switzerland), Bordeaux (France) and Cluj-Napoca (Romania)</p> |
| <p>Jan 2016 – Mar 2016 Co-Investigator Total: £5,000</p> | <p><i>Pervasive Health</i> Internal GCRF seed funding <i>Collaborators:</i> Lancaster University Ghana</p> |

Research Team

| <i>Post-doctoral Researchers:</i> | | <i>First subsequent employment</i> |
|-----------------------------------|---|---|
| Jul 2022 – present | Dr inès Raïssa Djouela Kamgang Epse Nouabo | |
| Jun 2021 – Mar 2022 | Dr Jordan Phillipson | |
| Jul 2017 – Aug 2020 | Dr. Abdessalam Elhabbash | Lecturer, Lancaster University |
| May 2018 – Dec 2018 | Dr. Maria Salama | Post-doc, Lancaster University |
| Feb 2017 – Jul 2018 | Dr. Vicent Sanz Marco | Associate Professor, Osaka University |
| Jul 2016 – Oct 2016 | Dr. Vatsala Nundloll | Post-doc, Lancaster University |
| Mar 2016 – Jul 2016 | Dr. Bholanath Surajbali | Innovation Lab Coordinator, MCB Group |
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| <i>PhD Students (current):</i> | | |
| Apr 2021 – present | Haruna Umar Adoga | |
| Jan 2021 – present | Matheus Aparecido do Carmo Alves | |
| Apr 2020 – present | Shiyam Alalmaei | |
| Jan 2020 – present | Dominic Lindsay | |
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| <i>PhD Students (graduated):</i> | | <i>First subsequent employment</i> |
| Nov 2015 – May 2019 | Dr. Assylbek Jumagaliyev | Software Engineer, Zühlke Engineering Ltd |
| March 2013 – Jun 2017 | Dr. Faiza Samreen | Post-doc, Lancaster University |

Service

General Chair:

- 2014-2018 CrossCloud
- 2015 Lancaster University Data Analysis Competition

Journal Editor:

- 2015 – present Journal of Internet Services and Applications thematic series on Cross-Cloud Computing (JISA-CCC)
- 2016 – present Research Ideas and Outcomes (RIO) journal
- 2016 – 2017 Journal of Internet Services and Applications thematic series on Complex Distributed Systems and Systems of Systems (JISA-SoS)

Track Chair:

- 2023 Conference on Metaverse Computing, Networking and Applications (MetaCom)
- 2020 Global Conference on the IoT (GCAIoT)

Doctoral Symposium Chair:

- 2022 International European Conference on Parallel and Distributed Computing (EuroPar)
- 2020 Conference on Utility and Cloud Computing (UCC)

TPC Member:

- 2016 – present Conference on Network and Service Management (CNSM)
- 2021 – present IEEE Military Communications Conference (MILCOM)
- 2023 IEEE Conference on Software Services Engineering (SSE)
- 2021 IFIP Networking
- 2021 FlexNGIA
- 2018 Conference on Distributed Applications and Interoperable Systems (DAIS)
- 2018 Symposium on Applied Computing (SAC)
- 2017 – 2018 Consumer Communications and Networking Conference (CCNC)
- 2017 – 2018 Workshop on Approaches, Analyses, and Performance Issues in Virtualized Environments and Software Defined Networking (PVE-SDN)
- 2017 Conference on COMMunication Systems & NETworkS (COMSNETS)
- 2017 Conference on emerging Networking EXperiments and Technologies (CoNEXT) student workshop
- 2017 Symposium on Integrated Network and Service Management (IM)
- 2017 Workshop on Future of Internet Transport (FIT)
- 2015 – 2017 Information-centric Networking (ICN)
- 2015 – 2017 Workshop on Security for Emerging Distributed Network Technologies (DISSECT)
- 2015 Embracing Global Computing in Emerging Economies (EGC2015)

Journal reviewer:

- 2022 – present IEEE Transactions on Parallel and Distributed Systems
- 2020 – present IEEE Transactions on Computers
- 2020 – present Software: Practice and Experience
- 2020 – present The Computer Journal
- 2019 – present ACM Transactions on Software Engineering & Methodology
- 2018 – present International Journal of Network Management
- 2018 – present IEEE Communications Magazine
- 2018 – present IEEE Letters of the Computer Society
- 2018 – present World Wide Web Journal

2017 – present IEEE Transactions on Network and Service Management
 2017 – present Cluster Computing
 2016 – present IEEE Transactions on Mobile Computing
 2016 – present IEEE Internet Computing
 2013 – present Computer Networks
 2014 – 2017 Future Generation Computer Systems
 2017 IEEE Pervasive Computing
 2017 IEEE Transactions on Cloud Computing
 2016 Journal of Grid Computing
 2016 Journal of Internet Services and Applications
 2013 – 2015 IEEE Transactions on Multimedia

PhD Examiner (External):

Jul 2021 Ramazan Esmeli (University of Portsmouth)
 Jan 2019 Ansar Rafique (KU Leuven)
 July 2018 Wajdi Hajji (Loughborough University)

PhD Examiner (Internal):

Feb 2021 Elnaz Shafipour Yourdshahi (Lancaster University)
 July 2019 Martin Bor (Lancaster University)
 Dec 2017 Matthew J. Edwards (Lancaster University)

PhD Examiner (Chair):

Apr 2022 Joseph Kaberuka (University of Glasgow)
 Dec 2020 Wyatt Lindquist (Lancaster University)

External Service:

Mar 2021 External Examiner for BSc Programme Validation Panel

Internal Service:

2019 – 2021 Distributed Systems Group Lead
 2019 – 2021 PhD Admissions Officer
 2016 – 2019 Athena SWAN Lead
I planned a very ambitious 4-year plan of how to improve gender equality issues at different levels of the School (academic and administrative staff, student experience, recruitment, development, etc.). We were awarded the Bronze Award on first submission.
 2015 – 2019 Postgraduate Teaching Assessment (Exams) Officer
 2015 – 2016 Equality, Diversity, and Inclusion Officer

Invited Talks

Mar 2020 University of Portsmouth, UK “Knowledge and DSLs for Cloud Brokerage Decision Support”, invited talk
 May 2018 Université de Rennes 1, France “Using ML to Simplify IaaS Decision Making”, invited talk
 Feb 2018 Université de Sherbrooke, Canada “Decision Support for Cloud Instance Selection”, invited talk
 Feb 2018 Concordia University, Canada “Decision Support for Cloud Instance Selection”, invited talk
 July 2017 Qatar Computing Research Institute, Qatar “Cloudy with a chance of heavy Fog”, invited talk
 Mar 2017 The British Council, Oman “Delivering Fog Services over Micro-clouds”, invited presentation at The British Council’s Innovation Policy Dialogue Symposium
 Feb 2017 University of Birmingham, UK “Cloudy with a chance of heavy Fog”, invited talk

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| Jan 2017 | Cambridge Computer Laboratory, UK | “The Grape Cluster and Delivering Fog Computing for Development”, invited talk at GAIA Community Networks: Sustainability & Regulation Workshop |
| Mar 2015 | The British Council, Egypt | “Managing Environmental Data in the Cloud”, invited talk at the UK-Egypt Joint Workshop on Agriculture and Water Management |
| Feb 2015 | The Kazakh-British Technical University, Kazakhstan | “Building Cloud Applications for Challenged Networks”, opening keynote presentation at the Workshop on Embracing Global Computing in Emerging Economies |
| Nov 2012 | Oak Ridge National Laboratory, TN, USA | “The Environmental Virtual Observatory pilot project”, invited keynote at the Knowledge Systems for Sustainability (KSS) partnership |
| Sept 2012 | University of Colima, Mexico | “Using the Cloud for Research, Education and Decision Support”, opening keynote presentation at the International Congress on Information Technology |
| June 2011 | University of Oslo, Norway | “Constructing an Environmental Virtual Observatory Using the Cloud”, invited seminar |

Publications

More than 60 peer-reviewed publications, H-index = 23, i10-index = 37 (as of May 2023).
 Google Scholar profile [here](#). All PDF downloads are available [from my webpage](#).