

JORDEN WHITEFIELD

Computer Security Researcher

WHO AM I?

I am passionate about computer security, and writing clean, thoughtful, code that adds value to products. A strong team player with great communication and presentation skills. I enjoy publishing and reviewing state-of-the-art security research.

SKILLS

Programming: Java, Python, JavaScript

Mobile Dev: Android

Other: docker, git, agile planning, formal methods

EXPERIENCE

- 6/2019 – Present **Specialist Security Technology** **Ericsson, Finland**
Developed embedded radio system threat models and found weaknesses;
Led a project and learning session on container security weaknesses and minimisation;
Collaborated with product development teams to identify how to harden systems with trusted computing technologies; Developed invention disclosures.
- 1/2019 – 6/2019 **Visiting Post Doctoral Researcher** **Aalto University, Finland**
Studied hardware security and distributed systems; supervised two MSc students reports on Android security; supported teaching and grading of CS-E4310: mobile systems security.
- 2017 **PhD Internship** **Thales Group, UK**
Implemented a security protocol for connected vehicles from my research; led the project and defined the software requirements; presented outcomes to stakeholders for internal review.
Supervised a graduate student in the development of the demonstrator;
- 2013 – 2014 **Associate Software Engineer** **Accenture, UK**
Developed hybrid mobile applications for Android and iOS; extended legacy UK government software systems with a RESTful API layer to integrate with modern systems.

EDUCATION

- 2015 - 2019 **PhD Computer Science** **University of Surrey, UK**
Thesis title: Formal Analysis and Applications of Direct Anonymous Attestation;
Completed a Graduate Certificate in Learning and Teaching; lab demonstrator;
Awarded an EPSRC UK Impact Acceleration Account for £47k that implemented a Vehicle-2-Anything (V2X) communication platform in a relevant automotive lab environment.
- 2011 - 2015 **BSc Computer Science, First class honours** **University of Surrey, UK**
Received the *EDF Best Digital Project Prize* for achieving the highest mark for my dissertation;
Received a *scholarship from the University of Surrey* for performance in my studies;
Extra-curricular: President of the Computer Science Society and led coding workshops.
Key modules: Computer Security, Information Security Management, Software Engineering.
- 2009-2011 **Level 3 BTEC IT Practitioners (Software Development), Triple Distinction** **Poole College, UK**
Key modules: Web server scripting, Client side scripting, Event driven programming.

PUBLICATIONS

- 2020 **Formal Analysis and Implementation of a TPM 2.0-based Direct Anonymous Attestation Scheme**
ACM Asia Conference on Computer and Communications Security, ASIACCS, Taipei, Taiwan.
- 2019 **A Symbolic Analysis of ECC-based Direct Anonymous Attestation**
IEEE European Symposium on Security and Privacy, EuroSP, Stockholm, Sweden.
- 2017 **Privacy-Enhanced Capabilities for VANETS Using Direct Anonymous Attestation**
IEEE Vehicular Networking Conference, VNC, Torino, Italy.

Formal Analysis of V2X Revocation Protocols

Security and Trust Management, STM, Oslo, Norway.

2016

Symbolic Reachability Analysis of B Through ProB and LTSmin

Integrated Formal Methods, IFM, Reykjavik, Iceland.

TALKS

2020

Direct Anonymous Attestation

The Trusted Computing Group – Attestation Working Group, Online

2019

Direct Anonymous Attestation in the Wild

IACR Real World Crypto Symposium, San Jose, California, USA

Container Security

Ericsson Network Security Seminar, Stockholm, Sweden

2018

Formal Analysis and Applications of Direct Anonymous Attestation

1st Annual Research Institute for Secure Systems & Embedded Hardware conference, London, United Kingdom

REFERENCES

Available on request.

KEY INFORMATION

British Citizen
Full UK Driving License

HOBBIES

Board Games
Baking