JORDEN WHITEFIELD

Computer Security Researcher



WHO AM I? **SKILLS**

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.

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 An-

droid 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 soft-

ware 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.

Level 3 BTEC IT Practitioners (Software Development), Triple Distinction 2009-2011 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	KEY INFORMATION	HOBBIES
Available on request.	British Citizen	Board Games
	Full UK Driving License	Baking