

# 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