JORDEN WHITEFIELD

PhD Computer Science

WHO AM I?

I have a passion for building tools and working openly with development teams to find and solve security issues. I enjoy sharing my research, in collaboration with academia and industry, with the security community. A strong team player who appreciates working with different cultures and diverse backgrounds.

SKILLS

Programming: python, java

Mobile Dev: android

Other: docker, linux, git, agile planning

EXPERIENCE

9/2021 – Present — **Security Engineer** — **Wolt, Finland**

6/2019 – 8/2021 — **Security Specialist Ethical Hacker** — **Ericsson, Finland**
Performed penetration tests for products across the business portfolio including complex 5G networks, cloud-native services, and mobile apps;
Collaborated with product development teams to identify how to harden their products;
Contributed to the product security hardening instructions;
Assisted the Product Security Incident Response Team (PSIRT) to verify security findings raised by customers/researchers and identify fixes;
Collaborated with the embedded radio system teams and produced threat models.

1/2019 – 6/2019 — **Visiting Post Doctoral Researcher** — **Aalto University, Finland**
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 junior team member in the development of the demonstrator;

2013 – 2014 — **Associate Software Engineer** — **Accenture, UK**
Developed 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 vehicular communication platform in a relevant automotive lab environment.
Authored an open source sublime text plugin for the tamarin prover security analysis tool.

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.

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
Badminton
Hiking