

## SUMMARY

---

- **Application Security Engineer** with strong background in mobile development
- Extensive experience working in small organizations in the financial sector, from robot investment manager in Germany to mobile payments solution provider in UK
- Can-do attitude, coupled with strong desire to **educate** technical teams within the organization, and **represent** security outside of it
- Comfortable working independently in a remote-working environment

## EMPLOYMENT HISTORY

---

### Senior Application Security Engineer, MYPINPAD, Cardiff, UK

July 2019 – Present

- Introduce and manage the Application Security Program within MYPINPAD
- Perform threat modelling on internally designed projects and proposed changes
  - Remote Key Injection design that complies with PCI PIN requirements
  - Error reporting in mobile browser that does not leak error context
- Lead effort in standardizing policy documents throughout the organisation
  - Ensure existing policies align with ISO 27001 standards structure
  - Own all Secure Software Development Life Cycle policies & code standards
- Assist Head of Compliance in attaining and maintaining multiple PCI certifications
  - Attained world's first PCI CPoC certification for contactless payment app
  - Reduced turnaround time for annual re-assessment from 35 to just 5 days
- Run Incident Response and Root Cause Analysis tasks for all AppSec incidents

### Android Security Developer, MYPINPAD, Cardiff, UK

April 2018 – June 2019

- Responsible for implementing cryptographic functionality in Android apps
  - AES-CMAC implementation in Java using a Whitebox AES primitive
  - ECIES-based protocol for securing traffic client past service gateways
- Conduct R&D tasks to further improve security posture of developed applications
  - Reverse-engineer SafetyNet's rules for hardware-backed key attestation
  - Develop tools for assessing the efficacy of mobile app obfuscations

### Android Engineer, Scalable Capital GmbH., Munich, Germany

November 2016 – March 2018

- Led Android team that developed the app for Europe's fastest growing robot investment manager: [cutt.ly/1zNGelH](https://cutt.ly/1zNGelH)
- Achieved and maintained a 4.0 star rating while introducing new functionalities

**Android and iOS developer, Guaraná Technologies Inc., Montreal, Canada**

June 2015 – July 2016

**Mobile developer, Guestful, Montreal, Canada**

May 2014 – June 2015

## **CERTIFICATION**

---

**Offensive Security Certified Professional**

In Progress

**Google Associate Android Developer**

November 2016

## **SPEAKING**

---

**GDG Munich Android - Testing support library: 2 years later...**

August 2017

[tinyurl.com/presentation-testing](https://tinyurl.com/presentation-testing)

**Scalable Capital Tech lunch - Security on Android, or lack thereof**

February 2017

<https://youtu.be/5xX9SEej7vw>

## **EDUCATION**

---

**Bachelor of Computer Engineering with Distinction, Concordia University, Montreal**

May 2016

Dean's list of Academic Achievement from 2010 to 2013

## **LANGUAGES**

---

English (fluent) - French (fluent) - Arabic (native) - Spanish (basic)