

## EDUCATION

---

Lancaster, UK	Lancaster University	Oct 2011 – July 2015
MSci Hons Computer Science (With Industrial Experience). 2.1		

## EMPLOYMENT

---

Software Engineer	Royal Bank of Scotland	Aug 2015 - Present
NatWest Markets, Syndicate		

- **Client Meetings Monitor.** Designed and implemented an Outlook add-in that tracks client meeting activity. This saw huge adoption by teams worldwide in both primary and secondary markets.
- **Client Meetings MI.** Created a VSTO C# solution which uses 'Client Meetings Monitor' data to produce colour-coded reports. The 'Client Meetings' solution became a key contributor to client relations metrics.
- **Syndicate Dashboard.** Used AngularJS, NodeJS and C# to migrate legacy solutions into a single web-based application. This application hosts primary markets deal-related information and documentation.
- **Investor Feed.** Implemented a Windows Service that communicates with various internal systems and uses object comparisons to synchronize golden source counterparty static with RBS's 'book building' application.
- **Deal Monitor.** Created a C# Excel add-in solution that verifies impartial bond allocation, flags orders that break selling restrictions and processes sales credits based on performance.

---

Software Engineer, Intern	DemoPad Ltd.	Jan 2015 – Mar 2015
---------------------------	--------------	---------------------

- **Device Drivers.** Implemented device drivers in Lua to integrate lighting (*Rako*) and thermostat (*Nest*) control with DemoPad's flagship smart home automation processor – Centro8.
- **Apple Watch App.** Designed and implemented an Apple Watch application to leverage Centro8's smart home control and feedback capabilities.

---

Technical Consultant	KitchPack Ltd.	Aug 2014 – Sep 2014
----------------------	----------------	---------------------

- **Marketing Strategy.** Discussed potential solutions with the owners to improve company awareness.
- **Web Scraping.** Used Scrapy/Python scripts to accomplish the agreed marketing strategy. Implementation saw sales increase by 35% over the first month and a noticeable increase in feedback via social media.

---

Software Engineer, Intern	Lancaster University: InfoLab21	July 2014 – Sep 2014
Knowledge Business Centre		

- **Consultation.** Worked closely with clients to scope their requirements into manageable projects and meet specific design and implementation needs.
- **Twitter Report Generator.** Created a bespoke web application with PHP/Laravel. This generated progress reports based on the client's customers' Twitter activity e.g. tweets, retweets, followers etc.

## UNIVERSITY PROJECTS

- 
- **Automated Spear-phishing System.** Designed and implemented a system that crafted spear-phishing email messages based on publicly available information to validate effectiveness. *Python, Java, Scrapy.*
  - **Chord Implementation.** DHT network and RESTful system that allowed multiple clients to submit computational tasks. This used a RESTful service to run tasks asynchronously using a DHT network. *Java, Apache Tomcat.*
  - **LUFELF Android App.** Part of a team that designed and implemented an award-winning android application. The application was a friends, events and location finder. *Java, Android.*

## Languages and Technologies

- 
- *Proficient with: C#, Java, SQL*
  - *Experience with: JavaScript, Python, Lua, PHP, Objective-C, C*