

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
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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 is a key contributor to client relations metrics.
- **Syndicate Dashboard.** Modernized several legacy applications into a new AngularJS frontend/C# backend web based solution. Dashboard is the golden source for deal-related information for primary markets.
- **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
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- **Device Drivers.** Implemented device drivers in C++ and 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
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- **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
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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.

PROJECTS

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- **Football Quickscore.** Snappy and responsive web application that shows team head-to-head stats across all leagues. Data is sourced from football-data.org's open API. ReactJS, JavaScript
 - **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.
 - **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

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- *Proficient with: C#, Java, SQL, ReactJS, AngularJS 1.x*
 - *Experience with: JavaScript, AngularJS 2/4.x, Python, C++, Lua, PHP, Objective-C*