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Personal Statement

I'm equally fascinated with code as I am cloud infrastructure, and I'm at my happiest when I experience the positive impact of my team's work. As a technical lead involved in technical planning for a tribe made up of around 10 teams, I've developed a skillset including project management and communication, and I've built on my time teaching programming at UoN to help with mentoring new and existing engineers.

I pride myself on having a well-rounded view of business, as well as software engineering. This comes from my varied background, which has involved me studying management, being a quality assurance lead, software engineer, building a start-up, winning a hackathon, representing the UK in a global competition and conducting research for a top UK university, as well as my side projects.

The reason for my achievements is simple; I love what I do.

In my personal life, I'm a father to a young boy and a husband to my wife, who is also a software engineer. My own hobbies include playing poker, gaming, short walks around Wollaton Park and taking vacations in Orlando.

Education, Academia and Certifications

Certifications:

2021

2020

2019

2018

2017

2016

2016

The University of Nottingham

2012

I love learning and helping others to. My journey with AWS has allowed me to create resilient architectures; troubleshoot production issues and help with day-to-day development of software. I'm keen to learn more about networking and Kubernetes next.

University Degree - First class, BSc Computer Science and Management (GN42) – University of Nottingham. Graduated 2012 and achieved the best individual dissertation award.

Work Experience

Manager Associate; Senior Software Engineer (SDE4) (Jan 2020 – present), for Capital One, Nottingham. As the technical lead within my team, I'm responsible for making technical decisions at team level, and mentoring new and existing engineers. As part of the role outside of my team, I'm responsible for understanding requirements, planning, architecting and presenting upcoming work across the wider tribe (upwards of 10 teams).

Principal Associate; Software Engineer (SDE3) (Jan 2018 – Jan 2020), for Capital One, Nottingham.. During this time I onboarded an offshore team in Bangalore, India, and attended AWS Re:Invent in Las Vegas. This role was less about coding, but I still found the time to debug problems and complete a few stories each sprint when needed. During this period, I was one of the main contributors to the design and delivery of Capital One's Open Banking APIs. I'm still one of the open banking registered technical contacts, and on call for support of these APIs. Reason for leaving role: Promotion

Senior Associate; Software Engineer (SDE2), (Dec 2016 – Jan 2018), for Capital One, Nottingham. In this role I worked in a team deploying APIs (both public and internal facing) onto AWS, using Java, Spring Boot, Hibernate and Jenkins. Further to the applications themselves, I worked on infrastructure as code, auto-scaling, security concerns and deployment pipelines. The main project I worked on during this time was an externally facing API, called quotation, which provides quotes to third party aggregators (i.e, The API that facilitates Capital One showing up on websites such as Compare the Market). Reason for leaving role: Promotion

Software Engineer, Java (May 2016 – Dec 2016) for MHR, Nottingham.
At MHR I was a Java Software Engineer. Here I gained experience in agile methodologies, Java EE, and working with Wildfly, Hibernate, Jackson and using tools such as Swagger and Jenkins. Reason for leaving: Looking for a new challenge and improved work environment

Research, School of Computer Science at Nottingham University (2012-2015).

I developed a marking system for assessing Java coursework solutions and providing real-time feedback. The system was named "The Marker's Apprentice" and was used for the assessment of over 9,000 submissions. For the cohorts using the system, a measurable improvement was recognised and as part of this work I achieved a commendable teaching award in 2015. Several parts of it are described in published in academic papers, e.g here (Static analysis of programming exercises: Fairness, usefulness and a method for application).

Lead Quality Assurance (2010-2011) for hoverState(), California
I led a team of 5 software quality engineers to ensure projects met the standards required. Working with teams from UK, China and USA. Reference available on request. Reason for leaving: To concentrate in my final year on my degree.

Quality Assurance Engineer (2009-2009) for hoverState(), California
Worked as quality assurance engineer, for projects based on Android, iOS, emails and web development, before being moved to a lead role. Reference available on request. Reason for leaving: Promotion.

My side projects and notable achievements

Nutbrown.io: Personal blog – available at https://nutbrown.io. A static website hosted using Cloudfront and S3, built using codepipeline for each commit to GitHub.

QR Clean (2020)

This is a very quickly thrown together project using AWS Amplify, in response to coronavirus. The premise is that QR codes can be used to replace the handwritten signs that detail cleaning schedules, found in many public washrooms and toilets. Cleaners can scan the QR codes which direct them to deep links to the website, where they can record cleaning sessions. This allows management teams to see an overview of their premises and when each location was last cleaned. It also provides some reassurance to visitors who may scan the QR codes to view a cleaning history or report any problems. The main project is fully serverless, made up of a single page app using React, several DynamoDB tables and some Javascript lambda functions behind AWS API Gateway. Sign up and sign in functionality is provided by AWS Cognito. The QR codes appeared in a few restaurants in Nottingham as a trial, before lockdown closed those restaurants. The project

is part of a newly registered business that is owned by a non-technical friend, who will be taking it forwards after the trial and MVP.

Social Wage and PromoteMyBrand (2016-2020) – I developed a web application for connecting companies to social media influencers. The website was developed for a start-up, called "PromoteMybrand". Shortly after the site development, the company received substantial investment. It ran on a Jetty server, using Hibernate and Apache Tapestry 5 and connected to various social media platforms for verifying accounts and creating automated posts on behalf of advertisers. The company was managed by two owners and several investors, with myself as a founding shareholder. It grew to having tens of thousands of registered users, an office in town, and over 20 employees, without any technical issues. Unfortunately, after members of the sales team recorded unrealistic expectations for future growth, the company struggled and went into administration in 2020.

Trumpbot – "Don't believe what you read" Winning Hack24 entry (2017) – This was a humorous twitter bot, created within 24 hours and hosted on EC2s. It compared a live feed of twitter posts against a database of 'fake news' articles scraped from snopes.com. If the twitter post was deemed to be semantically related to a fake news article, a bot account would reply to the message calling it out, with a (probably marginally insulting) quote from the 'what does trump think' API. The winning submission video can be found here.

Wedding web application (2016) – My wife and I wrote a website to manage RSVP's, a gift registry (Tracking payments with PayPal), invitations, food preferences and music tastes. The website ran on AWS and used Tapestry5 and Hibernate (Java) as the backend. This project shows my love for technology and before it went live on Amazon's servers, it was running happily on a Raspberry Pi.

Oxford University Press handwriting (2015) – I developed a typing system for creating handwriting practise printouts for children. The system is fully cursive (joint letters), which means there are many possible different glyphs for each letter for the different types of joins. I worked on a set of VBA macros for calculating the correct character to use from the font when typing, to allow connections to the previous and following character. This is used at many schools throughout the UK. A full description is available here.

Trollbox (2013) – Trollbox was an Android app for tracking the price of cryptocurrencies and provided a live chat feature. It connected to several BTC-e (Cryptocurrency exchange) APIs, which have now been shut down, and so has been removed from the play store.

Spindroid (2012) – A fruit machine for Android with over 8,000 downloads and a 4-star rating. This was my dissertation which I thoroughly enjoyed. However, I haven't had the free time to maintain it and never monetized the project, and so I have since removed from the store.

UK Microsoft Excel Champion, 2006 - At the age of 16, I held the title of UK Microsoft Excel champion from Microsoft and Certiport, which lead to a trip to America to compete to become the world champion. Newspaper articles are available on request. More information can be found here.

Relevant technologies I have experience with:

Java; AWS; Cloudformation; AppDynamics; Jenkins/CICD; TDD; Spring boot; Hibernate, JPA, Cucumber, AssertJ, Mockito, Gradle, Maven, IntelliJ.

It's very difficult to list every technology that I've used, and I push myself to be constantly learning. If you have questions about any specific tools or frameworks, please feel free to reach out: stephen@nutbrown.io