



Henry Bettany, MSci

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PROFILE:

I graduated from the University of Nottingham with a master's degree in Computer Science (First Class Honours), which included my third year at the University of Maryland (USA), having been accepted on an international exchange programme. Upon graduation, I was employed by Intoware, a company specialising in app and web development for their WorkfloPlus platform.

I embrace learning new skills, and one of the reasons for choosing to study abroad was to be taken out of my comfort zone. I enjoy new challenges and the chance to use my own initiative, be it as part of a team or individually. I have demonstrated that I am able to lead a team effectively whilst encouraging individuals to perform at their optimum. Examples of the project and freelance work (some of which are not in this document) that I have done are available on my website (www.henry-bettany.com).

EDUCATION:

2014 – 2018 MSci Computer Science with an International Year, University of Nottingham
Classification: First Class Honours

2016 – 2017 University of Maryland (International year of study)

2012 – 2014 Brentwood School 6th Form

EXPERIENCE:

July 2018 – Present **Software Developer – INTOWARE LTD**

Having initially joined Intoware's server team for their flagship product as a Graduate Developer, WorkfloPlus, I have worked my way throughout all aspects of the software-side of the business, including the back-end server using ASP.NET, front-end web using the Angular framework, and app development using Xamarin Native.. This broad spectrum of work allows me to gain new skills quickly, while helping the business achieve its goals by being very flexible and keen to get stuck-in. After 8 months, I was promoted from Graduate Developer to Software Developer.

- Developed numerous microservices on the ASP.NET Core framework, deployed using Kubernetes and Helm, which are used by both the mobile client, website, and web client
- Helped to develop the website built using Angular
- Unit tested code using Xunit and Moq
- Actively participated in meetings with fellow developers and management team to help plan and coordinate tasks
- Solely responsible for developing a proxy server which bridges the gap between the previous server and the next version, which is a complete rewrite of the system
- Writing scripts to install on-premise deployments of WorkfloPlus
- Assisting the installation of WorkfloPlus on the servers of Intoware's clients, including handling the post-installation support
- Building customer reports in our custom report designer using HTML, CSS, and Handlebars
- Training and onboarding new employees
- The technologies we use include: C#, .NET Core, ASP.NET, Identity Server, MongoDB, RabbitMQ, Azure Service Bus, Azure Blob Storage, Azure File Share, Azure Functions, Azure Table Storage, Azure DevOps, Docker, Kubernetes, Helm, Angular, Typescript, Xamarin Native, Xunit, Moq, SonarCloud.

September 2017 – April 2018 **Developer – UNIVERSITY DISSERTATION**

For my 4th year university dissertation, I created a platform which facilitates attractions, such as museums, to easily and effectively create augmented reality exhibits, which can be viewed on visitors' iOS devices. There are two parts to this project. The first is the Spark Creator, a website which allows attractions to place objects on a canvas to create scenes. The scenes can be exported and viewed in the second part of the project, the Spark Viewer. The system is now freely available.

- Designed and developed the Spark app and website in their entirety
- Use of Three.js on the website to create the augmented reality scenes
- Use of ARKit to display the scenes created on the website

June 2017 – December 2017 **App Developer – CRYPTOCURRENCY PORTFOLIO APP**

With the recent boom in the cryptocurrency market, I wanted to create a simple-to-use iOS and Android app to help people manage their cryptocurrency portfolios. Script allows users to track the value of their currency holdings and log orders of many different currencies.

- Designed and developed the cross-platform app (the data used by the app is obtained from an API) using Xamarin Forms in Visual Studio (C#)
- Published the app under my own name
- The app will be receiving updates in the future which will add new features

January 2017 – May 2017 **Group Leader – MOBILE DEVICE PROGRAMMING GROUP PROJECT**

Whilst at the University of Maryland, I worked in a team of 3 to create an Android app called LastSmoke to try and help people quit smoking. It allows users to track their progress while they are trying to quit, giving them advice and motivation along the way.

- Managed a group of 3 and assigned roles to different people based on each group member's strengths and weaknesses
- Designed mock-ups of the app which were used as a guide when creating the user interface
- Implemented the dashboard (the screen you get when launching the app)

January 2017 – May 2017 **Group Leader – PHP AND JAVASCRIPT GROUP PROJECT**

Whilst at the University of Maryland, I worked in a team of 4 to create a website called Find My Car that helps users to find their cars once they have parked them. We received full marks for our project. The website is available at cm3c389n.henry-bettany.com.

- Designed the website layout with the help of Bootstrap 3
- Implemented much of the PHP backend and the JavaScript to do with the map
- Tested the system to make sure that it works on all devices (both desktop and mobile)

August 2016 – December 2016 **Group Member – DATABASE DESIGN GROUP PROJECT**

As part of my time studying abroad at the University of Maryland, the database design class required us to design and implement a history of US presidential elections database in groups of two people. The result of this can be seen at cm3c424.henry-bettany.com. Our project received the highest grade in the class.

- Designed the database and located data sources for it
- Created the website to serve as the front-end for that database using HTML, CSS, and PHP
- Writing reports to explain how the system was designed and implemented

September 2015 – May 2016 **Group Leader – SOFTWARE ENGINEERING GROUP PROJECT (won best project)**

As part of my course at university, we were tasked with creating a cross-platform multiplayer card game called Wizard that worked on mobile devices and could be played over the local area network. Our project won the award for the best group project (out of around 30 groups).

- Led a team of 6 to ensure that deliverables were completed on-time and to a high standard
- Solely responsible for developing the network code that allowed devices to communicate
- Worked on all other aspects of the project's development, including writing reports
- Presented our app to visitors during the open day (which according to our supervisor was the deciding factor between us and another group when picking the best project)

SKILLS:

C#, .NET Core, ASP.NET, Java, C, C++, HTML, CSS, SCSS, JavaScript, TypeScript, Bootstrap, MongoDB, Angular, Microservice Architecture, Kubernetes, Docker, Helm, WPF, Windows Server 2012/2016, RabbitMQ, Azure Service Bus, Azure Blob Storage, Azure Table Storage, Azure File Share, Azure DevOps, Xunit, Moq, Hangfire, SonarCloud, PHP, MySQL, Oracle SQL, Identity Server.

INTERESTS/HOBBIES:

Squash, playing guitar, software engineering, and gaming.

REFERENCES:

Available on request.