

Education

2012-2017	Bachelor of Science in Computer Science Brunel University , London	Award: Second Upper Class (2:1)
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Technical Skills

Programming	Intermediate: C#, Java, MATLAB Novice: Javascript, Kotlin Basic: Python
Libraries / Frameworks	Node.js, ReactJS, AngularJS, DropWizard, Maven, JUnit, TestNG, Service Fabric, Castle Windsor, ASP.NET, SpecFlow, NUnit
Databases	CosmosDB, SQL Server
Systems / Platforms	Git, Azure, Docker

Work Experience

Current - Jun '18	QA Engineer - ASOS Enki Fashionbot - Implementing new features to improve the user experience on a Azure hosted C# Facebook Chatbot. - Undertaking tech debt to split the solution apart to help reduce build times - Added PDB file deployments to symbol servers in order to allow stepping over NuGet DLLs - Added stored procedure which is run on every deployment to clean up CosmosDB of any test-user entries - Introduced brand mapping functionality so end-users could specify specific brands within their searches, thus allowing users to see what they actually want to see - Introduced a pagination functionality within the chatbot responses to allow users to access more results from the ASOS catalogue - Frequent attendee of ASOS' internal "Next Gen Compute" courses which cover new technology stacks to improve my skills and knowledge - Attend twice-weekly code craftsmanship classes run by my Lead Developer in order to make the transfer over to Software Developer - Completely refactored existing test suite left behind by prior Senior QA to make it more robust and mapped according to the Testing Pyramid. Resulted in reduced deployment times of around 40% and a less "flaky" test suite	ASOS PLC
Jun '18 - Dec '17	Software Engineer - Information Classifier - Implemented new features on a Java microservice for data discovery and visualisation. An NLP solution implementing Stanford NLP, using a TDD and BDD approach to development - Helped implement extraction of text from uploaded documents and images using Tesseract OCR, allowing data to be easily scanned for compliance and GDPR requirements - Created an internal performance monitoring dashboard using Chart.js to monitor any degradation in the classification engine - Writing unit, integration, and UI tests using Mockito, TestNG, and Protractor for the End-to-End tests - Took on QA responsibilities (as we had no QA on the team) and trained other members of the team on the importance of the testing pyramid, and completely overhauled the automated test suite, whilst also refactoring the existing code to make it more unit testable and SOLID - Configured and remastered build & release pipelines with CI/CD using Maven, Jenkins and JIRA	Veritas LLC
Dec '17 - Jun '17	QA Engineer - Enterprise Vault - Actively attended training courses, code katas, and pair-programmed with senior developers to home developer skills - Paired with Principal Developer on feature which allowed archiving SMTP messages	
Jul '16 - Jun '15	Performance Engineer Intern - Enterprise Vault - Developed tool written in WPF and C# in order to perform monitoring and alerting of MSMQ statuses - Undertook benchmark and regression testing to ensure software quality and stability with third party software packages - Managed a large-scale performance and scalability environment, providing fortnightly reports for the leadership team on the current state of the software - Ran performance testing against third party storage devices and providing reports to determine whether the hardware met set specifications	

Projects

Artificial Neural Network for Intrusion Detection

Final year project to develop a Neural Network for aid in intrusion detection, using the NSL-KDD dataset. Trained the Network using a back-propagation method to detect intrusions by analysing packet attributes. Programmed and trained the network in MATLAB and resulted in an 87% detection rate. Paper available at harveysingh.co.uk/NeuralNetwork.pdf, and files available on request

Android Application Development

A group project to develop an Android application. Elected as team leader by my fellow members; gaining leadership experience in a project environment. Produced a set of deadlines within the group to ensure prioritised tasks were completed within set targets. Carried out research using journals, articles, the Internet and IEEE to ensure that the application met the “golden-rules” of user-friendliness. Developed the application using Java; using MySQL to develop the back-end database

Java Finch Robot Application

A group project to control a Finch Robot, with heavy use of the Command Design Pattern to complete this task. Designed and implemented a test-plan; ensuring full functionality was met and checking for any errors before the project was. Conducted a demonstration of the robot followed by a code review to analyse my methodology, which was met with a lot of praise for my effective use of the command pattern. Source code available at <https://github.com/harveysingh1/Finch-Robot-Project>

GalacticRaider Microsoft XNA Game

A final-year project to develop a game prototype using XNA Game Studio. The game was a shoot-em-up style game based in space with three levels in total, with incremented difficulty and a third level with a final boss. The game implemented multiple sprites and animations, with effective sounds. Resulted in an A-grade overall. Source code available at <https://github.com/harveysingh1/Galactic-Raider>

HarveySingh.co.uk, my personal website

I am in the process of (re)building harveysingh.co.uk, a website which will contain information about myself and my history. Currently the website is written in pure HTML, CSS, JavaScript, with the responsive layout being design using Bootstrap. I am going to be remaking the whole website using React with Redux, whilst also creating a blog within which I will hope to share any relevant industry knowledge I have (and will) gain over the coming years of my career

About Me

- Programming and learning new technologies has now become a big part of my life, and I try to keep myself up-to-date with the latest in tech by attending conferences, joining meetup groups, and going to training courses.
- I consider myself quite a social person and enjoy group outings with my team; I frequently go to escape rooms and other group activities which I think is beneficial for a team to mesh together
- I am an avid gamer and find myself playing the latest Triple-A titles and even older games such as Old-School Runescape. I have found a new interest in automating the “grind” needed in some of these games, and have attempted to create scripts in order to automate these processes
- I love animals, and have a Cavapoo puppy called Simba. I love training him and teaching him and my end goal is to teach him to fetch me something from the fridge (although it’s a little more difficult than I anticipated)
- I have always wanted to play guitar and at the age of 25 I have decided to pick it up! My goal is to get to Grade 8
- I like to keep fit and help others reach their fitness goals. I have taught many friends and family about the best (and healthiest) ways to reach their goals, whether they are trying to gain mass or lose weight, with successful results
- My work at ASOS and Veritas introduced me to Artificial Intelligence (specifically Natural Language Processing) has piqued my interest in the advancing region of Machine Learning and AI in general. I hope to work with this area of technology in my future career

References available upon request