

# Harvey Singh

## 333 Eastern Avenue, Ilford, Essex London, IG2 6NT

#### **United Kingdom**

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## **Education**

2012-2017

Bachelor of Science in **Computer Science** 

**Brunel University**, London

Awai

Award: Second Upper Class (2:1)

**Technical Skills** 

Programming <u>I</u>I

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 CosmosDB, SQL Server

Databases Systems / Platforms

Git, Azure, Docker

# Work Experience

## Current -Jun '18

## Associate QA Engineer - ASOS Enki Fashionbot

**ASOS PLC** 

- 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

## June '18 Dec '17

#### Associate Software Engineer - Information Classifier

**Veritas LLC** 

- 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

## Dec '17

## QA Engineer - Enterprise Vault

Jun '17

- 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.

- **Lyrics generator using neural networks** Wrote a lyrics generator using TensorFlow that generates a new song in an artist's style. A Long Short Term Memory (LSTM) Neural Network learns the artists' styles of writing including words, rhymes, chorus patterns, etc. for the task.
- **Selene** Built a social music-recommendation Android app based on YouTube that analyzes usage data from friends and nearby users and recommends the most popular tracks.
- **Retrieving salient sentences from Reddit AMAs** Built a summariser that provides summaries from /r/iAMA clustered by topics, using k-mean clustering and Alchemy API.

#### **Hackathons & Competitions**

#### Mar 17 | MetaKGP Dashboard

Inter-IIT Tech Meet '17

- Won bronze medal for building a NUS-Mods style dashboard with various utilities created for students of my college. The dashboard was built with a NodeJS backend and had several utilities including smart timetable, news aggregator, question paper portal and professor finder to name a few.

#### Dec 16 | Stol (SMS to Internet)

Pragyan Hackathon '17

- Made an android application for basic internet access like Google Maps navigation, Duckduckgo quick search, Zomato reviews, etc. without a data connection. Communication with the server was done using Twilio's SMS APIs.

#### Apr 16 Data Extractor for 2D plots

OpenSoft '16

- Built a graph extractor that detects multi-variable graphs in any given PDF and tabulates them autonomously taking into consideration features like axis values, scales and legends.