

# Waheed Rafiq

*Software Developer*

<https://waheedrafiq.github.io/>

<http://www.waheedrafiq.net>

## Personal Profile:

I am an experienced and degree qualified Software Developer in a range of technologies. An excellent problem solver and the highly self-motivated person with a creative approach and positive attitude. A friendly person with an outgoing personality. I just completed my BSc (Hons) Computer Science degree at Birmingham City University with a 1st Class Hons and looking for a challenging Developer position with an innovative business.

## Skills Summary:

### **Programming:**

Java	C/C++	XML
Python	SQL	HTML
OpenCV	MySQL	XAML for Windows Phone
C#	Swift 3	

### **IoT devices:**

Arduino	Raspberry Pi	Asus Thinker
---------	--------------	--------------

### **Cloud Services:**

Azure	Amazon Cloud	MongoDB
-------	--------------	---------

### **Networking:**

CompTIA	Directory Services	Citrix Server
MCP	Directory Structure	
CCNA	VNC	

### **Industry:**

Team Leader	Trainer
M1 ERP	

### **Developing Tool:**

MongoDB	NetBeans	Visual Studio 2017
---------	----------	--------------------

## Education:

### **BSC (Hons) Computer Science**

#### **Birmingham City University (2013- 2017)**

Achieved 1st class honour

During my final year project, I invented a device that I refer to as 'XploR Cane'. The market for this device is primarily for the visually impaired. My project incorporated technologies such as C#, Azure cloud services, OpenCV and Python. The project was something very close to my heart as one of my family members is blind. To achieve the aim of the project, I had to research into face algorithms to compare different face detection engines such as OpenCV, IBM Watsons and Microsoft Face API.

This concept received awards from the University such as entrepreneurial 2016 award, Innovation 2017 award and coverage from the international media such as CNN, DailyMail, Skynews and many other local media companies.

## **Udemy Training:**

**Java Enterprise Edition with Web Development and User Experience**

While studying this course, I gained a wealth of understanding of Java with a heavy focus on Java Enterprise Edition. Applied agile practices for developing an enterprise application, using Java, Maven and git.

### **Unit Testing:**

The course covered standard fundamental testing process that focused on Test Driven Development (TDD) which allowed the trainee to keep in mind of the possible outcome of not only the system but each function within the program. Because of this training, I feel I would be comfortable working with a variety of different tools relating to programmings such as GitHub, NetBeans, IDE, Bitbucket and TDD.

To achieve the Unit Testing Class diagram were design using draw.io in Unified Modelling Language (UML)

### **Continuous Integration Fundamentals:**

Provided benefits of using Continuous Integration principles in a development environment. Install and configure CI, CD and a variety of tools that can be used. The course focus on Linux usage with tools such as Jira and Jenkins.

### **OO Designs with Java:**

The first series of tasks after the initial lecture was to complete a series of basic tasks including outputting and getting to grips with the essentials of OOP. Once these tasks are completed the task got onto more complex tasks like creating a garage system using OOP and having the functionality to add/remove and fix vehicles within this garage. This task was interesting to complete, and by the end of it I found myself comfortable with most OOP concepts and find myself able to do the same tasks much faster having completed this garage system.

### **Birmingham City University, Teaching Assistant 2015-2017:**

Entrusted with assisting and preparing lecturer in lesson planning for undergraduate courses in 'Research and Professional Practises, Java, C#, Python, Arduino and Raspberry Pi.

- **FDS Sc ICT 1st Class Degree Birmingham City University (2015)**
- **GCSEs Washwood Heath School English Literature and Oral Communication**
- **OCN Level 2 Programming Visual Basic 5 East Birmingham College**
- **NVQ II Software Creation in C Programming KCT Computer Training**
- **Microsoft Certified Professional (MCP) Amraf Plc**

### **Work History:**

#### **April 2018-Present IT Systems and Manufacturing Processes Project Manager[self-employed]**

Always Engineering

This role is co-funded for 7 months part by European Regional Development Fund (ERDF); duties involved reviewing existing processes to recommend new methods of working. Analyse business and stakeholder needs thus delivering quality solutions that met those needs. The project main goal was to deliver Enterprise Resource Planning solution that enables the end user to deliver real-time monitoring of WIP based on barcode technology system. This was achieved by C#, SQL in conjunction with ASP.NET. Prior end users performing beta testing of the application; Unit Testing was done in VS2017. A wealth of information was applied to this project such as Lean Manufacturing, Overall Equipment Effectiveness (OEE), Standard Minute Value (SMV) and Unit of measurement (UoM). This

approach met the customer's requirement. Learning M1 ECI, ERP software and its Integrated development environment which is completely different from the VS2017 environment were challenging, rewarding and yet interested to see how major players in the market adapted different approaches to a different sector of the industry that requires software development.

### **Nov 2017 – Feb 2018 Full Stack Software Developer**

Clockwork IT

Entrusted with previous developer project design in WinDev WLanguage duties included developing the new application, components which involved working with user's requirement and to determine priorities. Regular meeting with the client's face to face at the office. Analysing data, conducting compatibility and quality assurance testing which was performed by manual testing. Other responsibility included designing reports in Visual Studio using C# and third-party reporting tool known as 'DevExpress'. This also included a good understanding of SQL relational database and the ability to code effectively in SQL.

The client that I was responsible for is one of the UK major gritting company who deals with over one million pounds worth of transaction, my responsibility was involved in designing an Invoicing system that was met to the client standard. I felt privileged and honoured to be able to deal with such a huge responsibility, given that I only recently graduated.

### **2015-2017 (during University)**

#### **Birmingham City University Entrepreneur Mentoring.**

Mentoring first year student project for Birmingham Innovate Fest exhibition, organising, planning each team's target. Provided technical support for Arduino and Raspberry Pi. Monitoring teams to innovate in the different area of industry.

### **2014- 2016**

#### **BlindX3 Ltd CEO & Director of Software Engineering in partnership with Birmingham City University [Start-up Company]**

Duties involved research and development of Computer Vision Algorithm, responsible for managing a team of 3 software developers. Innovate Smart Cane for the Visually Impaired. Business planning, liaising with senior Professors regarding Computer Vision, Debugging code, troubleshooting Linux OS, researching into a different aspect of hardware, Intel RealSense SDK and troubleshooting OpenCV.

### **Self-Employed Work History**

Prior recent 'Credit Crunch' I was a self-employed consultant who worked very closely with the local education sector for over 15 years. Below are continuous successful projects that I deliver to my clients. Due to IR35 restriction, most contracts lasted up to 2 years or less.

### **2013-2014**

#### **Turn It On Ltd (Self Employed)**

Managed help desk queues Installation of Windows 2008 Servers, Configuring GPO on domain level as well as peer to peer network. Pilot test VPN in the Education environment, research into SOLUS 3 education MIS system, deal with any help desk call issues, such as MS Office Product, network hardware issues organise a visit for repairs etc.

The following roles were completed on a self-employed contract basis:

- **December 2012 to August 2013-** Nottingham County Council Helpdesk Support
- **November 2008 to December 2012-** Strictly Education MIS Service Desk Team Leader
- **April 2008 to February 2010-** Solihull SMBC 2nd Line Support
- **January 2008 to April 2008-** Education 2 I.T Helpdesk Officer
- **September 2008 to December 2008-** Oxfordshire County Council I.T Helpdesk Officer
- **January 2008 to July 2008-** Capita Plc IT 1st Line Support Officer
- **September 2007 to December 2007-** Lampton Secondary School Data Manager for SIMS
- **June 2005 to August 2007-** HBS Milton Keynes Council 2nd Line Support
- **August 2004 to June 2005-** Nottingham Council IT Consultant for SIMS Support
- **2002-2006-** Part Time Royal Signals Switch Operator Territorial Army
- **January 2002 to December 2003-** Four Oaks Sutton Coldfield Four Oaks Cluster Engineer □  
**August 1998 to December 1999-** Kalamazoo Reynolds C and Visual Basic Trainer

**Interests:**

Since 2015 I have been a member of EHaCS (Ethical Hacking and Computer Society at BCU). This involved helping other fellow students with their programming skills and obtaining Ranks point on HackerRank. I also enjoy programming in Windows 10 mobile Apps and, building basic robots. Into Suba Diving currently, education status in this is at Rescue Diver PADI qualified.

**References are available upon request**