Shamveel **Ahammed**

SOFTWARE ENGINEER

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Education

The University of Manchester *Manchester, UK*
MEng in Software Engineering (Hons) with Industrial Experience *2015 - 2020*
- **First Class Honours**
- Main Courses: Software Engineering, OOP with Java, Algorithms, Machine Learning, Distributed Systems, Database Fundamentals, Computer Vision, Computer Graphics, User Experience
- Third Year Project: Demonstration of Object Detection for the Visually Impaired (76%)

International Hope School Bangladesh *Dhaka, Bangladesh*
Pearson Edexcel A Levels *2012 - 2014*
- Mathematics (A*), Pure Mathematics (A*), Physics (A), Chemistry (A).

Experience

Barclays Bank PLC *Glasgow, UK*
Software Engineer *Aug. 2020 - Present*
- Bring feature enhancements for the Equity Trading Web (ETW) app, and improve code coverage and release pipeline. Carry out the complete deployment of AWS compute products to the PROD and non-PROD environments.
- Worked on the Angular 14 migration project for ETW application, based on a monorepo and micro frontend architecture pattern. Primarily involved with integrating Cypress end-to-end testing framework in the sourcecode and unit testing for angular components.
- Responsible for developing and testing feature enhancements to the Barclays Trade Services (BTS) application, in line with specific business requirements from the eFX Trading teams. The application utilized a multi-threaded C++ architecture and boost libraries. Also, I contributed to the BTS FX UI application based on Java 8 and Java Swing.

IBM UK Ltd. *Hursley, UK*
Software Engineering Intern *Jul. 2018 - Aug. 2019*
- Worked on a full-stack web application "Dashboard", using Sinatra Framework to monitor usage metrics and statuses of all department-owned servers, along with custom widgets to display real-time project progression and metrics graphically.
- Implemented features and bug fixes for multiple Java based multi-threaded scanning tools, used in the process of "Bluewashing" newly acquired products.
- Co-authored a utility tool for identifying all the packages installed on a docker image, used for clearance purposes.
- Deployed microservices onto the Docker Swarm, to run the services stacks used by various department applications. This involved managing the JFrog Artifactory connections and monitoring the travis CI for new builds.
- Assisted the clearance team by having 1-to-1 sessions to help them troubleshoot any issues with the scanning tools.
- Operated as part of the systems administrator team to monitor the health and functionality of the department's build servers.
- Gained a responsive and agile development experience in the project lifecycle - by being involved in all stages of production to deployment, tackling the challenges associated with maintaining and optimising the application to perform reliably, and finally to deal with the complexity of designing algorithms to develop new features for an application.

Mohona Packages (BD) Ltd. *Dhaka, Bangladesh*
Technology Analyst *Jul. 2017 - Aug. 2017*
- Designed a logistics application with GUI, to process client orders and generate detailed production reports and invoices. The app helped cut down the order processing times by 50%.
- Created an executable script to produce shipping delivery forms to meet various delivery requirements.

MagnaPass *Manchester, UK*
Summer Intern *Jul. 2016 - Aug. 2016*
- Developed new features for the website and carry out various bug fixes before each release (*magnapass.co.uk*).
- Engineered a python script to transfer user data over from MailChimp to an on-premise database.
- Worked remotely within the team on a large codebase, and regularly participated in code reviews and scrum sessions.

Trade Young International Company Ltd. *Dhaka, Bangladesh*
Website Developer *Jun. 2016 - Jul. 2016*
- Operated as the main lead in developing the company's website and it's subsidiary websites (*tradeyoung.com*).
- Consulted with the stakeholders regularly for design changes to the UI, favouring a customer-oriented approach which improved the company sales figure by 30%.

Skills

Programming	Python, Java, Ruby, R, C, C++, Bash, OpenGL, Verilog, Assembly Language, Matlab, Groovy, XQuery, SPARQL
Tools	Eclipse IDE, IntelliJ, Xcode, Android Studio, Ant, Gradle, Jenkins, Travis, Trello, Veracode, IBM Bluemix, Sonarqube
Web	HTML5, PHP, CSS3, Javascript, MySQL, MongoDB, JSON, XML, Docker, Kubernetes, Amazon Web Services, Git
Frameworks	Sinatra, Ruby on Rails, Flask, Spring MVC, JUnit, Cypress, Angular, PyTorch, Tensorflow, Flutter

Projects

SMAART

- Served as the team leader for an IBM giveback project called "Systems Maturity Assessment, Analysis & Road mapping Tool". It was heavily used for Systems Consulting engagements across various IBM consulting teams.

Third Year Project

- Completed a third-year project and dissertation on 'Demonstration of Object Detection for the visually impaired' which involved creating an application using Google's Tensorflow API trained on ImageNet dataset for real-time object detection with auditory feedback.

Stendhal

- Developed a multi-threaded, client-server open source containing over 6000 Java Classes using Eclipse, Apache Ant, Jenkins, and JUnit Testing as part of the second year Software Engineering project called the Stendhalgame.org.

Eventlite

- Created a scalable client-server web application as a part of the Software Engineering group project, using Java's Spring Framework with third-party API integration and REST web service features.

Machine Learning Projects

- Implemented multiple machine Learning algorithms such as (K-Nearest and Perceptrons) for university projects "Hand Writing Recognition" and "Email Spam Filtering".

Whispers

- Participated in a team to create an online version of the "whispers"/ "telephone" game (as part of the first-year team project) with personalised dashboard profiles for players, displaying an "object" that user had to recreate and send to other players. The next player would follow the preceding steps and eventually this would lead to a trail of attempted drawings.

Extracurricular Activity

Computer Science Student Ambassador
Manchester, UK

TEAM MEMBER
Sep. 2016 - PRESENT

- Working as a Computer Science Student Ambassador at the University on Visit Days to assist prospective students and facilitate with the set up of the event.

HORnet Representative
Manchester, UK

CORE TEAM
Aug. 2017 - Jun. 2018

- Delivered resident computer assistance in the University's halls of residence, and also educated residents about technology resources to promote academic and personal growth.
- Worked as part of a large team in conjunction with PSS IT Support Staff, the Hornet Reps support computers, the residential computer networks and computer clusters.

The University of Manchester PASS Leader
Manchester, UK

PEER MENTOR
Sept. 2016 - Jun 2017

- Organised weekly sessions to help first-year students in transitioning to the University, through constant collaboration and group activities.

Bangladesh Student Society (BSS)
Manchester, UK

MEDIA AND COMMUNICATIONS MANAGER
Aug. 2016 - Jun. 2017

- Promoted and managed all social events through various social media outlets, including collaborating with other student societies to arrange events together.

Honours & Awards

2017	**Bronze Award Winner,** Manchester Leadership Award	*Manchester, UK*
2015	**Winner,** BAE Systems Capture the Flag Challenge	*Manchester,UK*
2014	**First Prize for Country Highest Marks,** The Daily Star Award	*Dhaka, Bangladesh*