Sunny Miglani

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Software Engineer at Micro Focus
First Class with Honours graduate (Masters of Engineering - Computer Science) from University of Bristol.
Require Tier 2 or 5 Sponsorship to work in UK. Currently Tier-2

Experience

Micro Focus
Newbury, United Kingdom

Software Engineer
September 2019 - Current

- Worked on enterprise application using Java as the main language. Creating plugins for the Eclipse IDE
- Learned the skill of picking up a code base and quickly familiarising myself with the concepts and structure, allowing me to maximise my contributions.

Bristol Interaction Group
Bristol, United Kingdom

HCI Research and Development Intern
June 2018 - August 2018 - 2 Months

- Built a **dynamic quiz as part of an Amazon Alexa skill** that **reduces inequality** in education for sight impaired students in school settings through audio and haptic feedback-based systems.
- The application was built using AWS Tools and Alexa kit, and followed the Co-Design Research Methodology.
- Co-authored an award winning paper at the HCI Conference (CHI-2019) where the project acted as a user study

SPHERE Research Group
Bristol, United Kingdom

Data Analytics Intern
June 2017 - August 2017 - 2 Months

- Developed an algorithm for a **passive radar system** that used **RSSI** (Return Signal Strength Indicator) values from WiFi signals in a smart house for location tracking without the need for any wearable devices. This can further be applied into finding changes in any signal based data.
- Using simple correlation analysis, I created a tool that **helps identify redundant temperature measurement nodes** in an IoT network. This reduces the number of devices required to run the smart house, thereby reducing the integration and maintenance costs.

University of Bristol
Bristol, United Kingdom

Peer Mentor
September 2016 - January 2018 - 2 Years

- Helped 14 mentees over the span of 2 years to help integrate them into the university life, and signposted them with their issues.

University of Bristol
Bristol, United Kingdom

Teaching Assistant
September 2017- June 2018

- **Concurrent Computing**: Explained the principles of concurrency including the functionality of low level C programs using common debugging tools such as GDB for a lab of 150 students.
- **Software Product Engineering**: Managed two 6-people teams while teaching and facilitating the scrum and agile methodologies. This helped me understand how to promote clear communication in teams and how to work with a variety of different viewpoints.

University of Bristol
Bristol, United Kingdom

Course Representative - Voted by the student body of 4th year CS
September 2018 - June 2019

- Liaised between students and faculty on various matters, with the goal of improving the student experience. This helped me understand how larger organisations work and helped me develop my skills to suit such organisations.

Education

University of Bristol
United Kingdom

MEng in **Computer Science**
2015 - 2019

- Awarded First Class MEng Degree with Honours in **Computer Science** (4th Year - 70%, 3rd Year - 68%, 2nd Year - 69%, 1st Year - 61%)
- Modules Covered: Machine Learning, Introduction to Data Analytics, Cloud Computing, Cryptography, Applied Security, Web Technologies, Computer Architecture, Data Structures and Algorithms, Language Engineering and various group projects to build full applications.

Bishop Cottons Boys' School
Bangalore, India

A Level Equivalents
2013 - 2015

Overall 90% (STEM Based subjects)- Computer Science, Maths, Physics, Chemistry and English.

Awards & Publications

2019 **Hele Shaw Prize by Faculty of Engineering at University of Bristol**, Awarded for being an all-rounded student with a good academic and social record, and contributing to the faculty through the degree.

2019 **Best Paper Award for Published paper at the Computer Human Interaction Conference (CHI)**, Co-Designing for Inclusion with Visually-Impaired and Sighted Pupils

2017 **Bristol PLUS Award**, Given to a small percentage of students who take action into their employability and gain experience in their field of study

2015 **Barry Thomas Scholarship Award**, Awarded for excellent A Level Results

Programming Languages

Proficient, Java, C, Python 2 and 3

Familiar, .NET/C#, C++, Javascript, COBOL, LaTeX Formatting

Softwares, Eclipse IDE, Jupyter Notebook, Python Flask, Git, SVN, RemoteWork SCP/SSH, Microsoft Azure, AWS Suite, NLTK/SpaCy

Projects

Micro Focus Hackathon - First Place Award

2020 at Micro Focus

5 person team

- Created a custom scalable FaaS application that allows running COBOL on demand in a serverless environment on Microsoft Azure using Azure Blob Storage, Azure Function app, Azure App platform and GitHub IO pages.

Sentiment Shifting Tool

2019 at Bristol

Final Year Thesis Application

- Used **NLTK/SpaCY** and other Python3 libraries to build an application that can suggest alternative words to use in a similar fashion to auto-correct to help make text based communication more polite. Invented and integrated the algorithms involved myself. Obtained a first class mark for the work

Boeing and Bristol Computer Science Society Wellbeing Hackathon

March 2019

6 Person Team

- First Place at the Wellbeing hackathon for Mental Health category by building a smart calendar that uses convolutional neural network to learn your habits and schedule an activity.

Third Year Project: Virtual Reality and Android Based VR Experience/Game

2018-2019 at Bristol

6 Person Team

- Created a **Virtual-Reality** based Murder Mystery experience that used BLE (**Bluetooth Low Energy**) **Beacons** and Android Google Cardboard. The final result was an immersive experience with 6 players that used custom created stories in a large room using bluetooth beacons to calculate position for the VR environment. System used combined multiple technologies together in a cohesive fashion.

Cloud Computing using Amazon Web Services

2018-2019 at Bristol

3 Person Team

- Created a **fully scalable** video hosting website on AWS using various serverless services such as AWS RDS, AWS Lambdas, AWS DynamoDB and AWS S3. Contributed towards the serverless logic, architecture and databases in the project.

Amazon Alexa Applications

2018-2019 at Bristol

Personal / Internship Project

- Used **NodeJS** to build and maintain multiple amazon alexa applications that interact with various APIs. Projects are available open on my github.

Smart Augmentation and Social Media for Enhanced hydration amongst peers

2018-2019 at Bristol

7 person team

- Worked in a team to create an external device that tracks motion in water bottles and integrate statistics of drinking into a social peer persuasion methodology to help promote hydration amongst friends
- My work was building the backend and REST-API for the website to interact with these external devices, and push the data to frontend.