Samanyou Garg

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EDUCATION

BSc (Hons) in Computer Science | University of Manchester *2015 – 2019*

WORK EXPERIENCE

Application Developer Industrial Placement | Vertex Pharmaceuticals *July 2017 - June 2018*

- Worked on a genetics and genomics data platform (Flask/AngularJS/ElasticSearch). Downloaded, cleaned and integrated big data from various sources, extracted useful insights from it and presented it to users in the form of visualisations. Also, set up multiple AWS instances from scratch.
- Integrated lab equipment directly to the network using raspberry pi and built an IoT application (Python/Flask/MySQL) allowing scientists to extract data from the equipment as well as analyse and visualise that data in real-time.
- Redesigned a legacy app (Python/Django/MySQL) from the ground up and added new functionality to streamline an internal process with a massive amount of positive feedback from the stakeholders.
- Created and established REST API design standards and best practices for application developers to create an API layer on their web projects.
- Developed a Progressive Web App, making it quick and easy for any employee to report incidents and accidents, thus overcoming the challenges of accessibility and increasing the report numbers by 3 times.
- Created a REST API (Flask/Python) allowing any web application to interact with the servers embedded in legacy barcode scanners using python's socket library.
- Liaised with research scientists to uncover their needs, convinced them to embrace computing and translated their requirements into innovative software-based solutions resulting in increased productivity.
- Diligently learned about and adapted to company's web development standards and procedures.

Web Developer | CRIS | New Delhi, India *June 2016 - Sept 2016*

- Identified and analysed client's requirements, processed flow charts, upgraded, tested and deployed a web app (Java/Spring) incorporating all milestones with full customer satisfaction.

PROJECTS

BhagavadGita.io | Python, Flask, ElasticSearch, PostgreSQL, AWS *March 2018 - June 2018*

- Developed a modern Gita (700 verse Hindu scripture) app with a simple, beautiful and easy to use interface, helping the user focus on reading.
- Implemented OAuth 2.0, 3rd party social login APIs, Elasticsearch for full-text search, Progressive Web App functionality, REST API, OpenAPI spec, android wrapper, daily Email and Push Notifications.

Group Emotion Recognition | Python, Flask, Tensorflow, OpenCV, Numpy *Sept 2018 - May 2019*

- Developed a hybrid machine learning system incorporating Deep Convolutional Neural Networks (CNNs) and Bayesian Networks for group emotion recognition in the wild. The stated system achieved 65.27% accuracy on the validation set which was in line with state-of-the-art results.
- Also, built a Progressive Web Application and an accompanying Android app allowing users to test out the system with their own pictures.

Stendhal Open Source Game | Java, Git, Apache Ant, Jenkins and Junit *Sept 2016 - Jan 2017*

- Tested, debugged, built, developed and deployed a multi-user, multi-threaded, client-server open source game containing over 6000 Java classes and 1800 test cases.
- Worked on the automation of builds and tests leading a team of 6 people over 12 weeks.

SKILLS

Programming Languages: Python, SQL, Java, HTML, Javascript, C.
Other Technologies: Bash, Docker, NoSQL, Nginx, Hadoop, Unix, Tensorflow, Amazon Web Services (AWS), Git, Jira, Jenkins, Pandas, scikit-learn, CSS.

VOLUNTEERING

Volunteer | Pravah *April 2013*

- Keenly volunteered with an NGO for a 5-day long rural sensitising trip to the villages in Una, Himachal Pradesh, India. Interacted with villagers and their children, helped them in daily chores, learnt and understood their lives, and encouraged them for a higher purpose.