Samanyou Garg

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EDUCATION

BSc in Computer Science | University of Manchester

(Expected) 2015 - 2019

WORK EXPERIENCE

Application Developer Industrial Placement | Vertex Pharmaceuticals

July 2017 - June 2018

- Worked on a genetics and genomics data platform. Downloaded, cleaned and integrated big data from multiple sources for target identification and prioritisation. Created data analysis and visualisations using Flask, pandas, numpy, D3. Set up multiple AWS instances from scratch.
- Redesigned a python-driven web app and added new functionality to streamline the process of "blood donation for drug testing" with tremendous positive feedback from the end users.
- Developed a Progressive Web App, making it quick and easy for any employee to report incidents and accidents, overcoming the challenges of accessibility and security. Wrapped the web app into a robust native Android app and deployed it to many Android devices.
- Integrated lab equipment directly to the network and built an IoT application allowing scientists to extract data from the equipment as well as analyze and visualize that data in real-time or over the course of an experiment window using a task scheduler.
- Introduced a fully comprehensive REST API "standard project template" for other developers to quickly create an API layer on their web projects.
- Created a REST API allowing any web application to interact with the server embedded in barcode scanners using python's socket library.
- Engineered a web application to automate the workflow of filling paper Risk Assessment forms by chemists, when starting a new experiment.

Web Developer | CRIS | New Delhi, India

June 2016 - Sept 2016

 Upgraded the "Rail Road Crossing Management System" for better planning, coordination and faster execution of work between two Government Departments.

PROJECTS

BhagavadGita.io | Flask, ElasticSearch, PostgreSQL, Material Design, AWS

- Implemented OAuth 2.0, 3rd party social login APIs, Elasticsearch for full-text search, Progressive Web App functionality, REST API, OpenAPI spec, native android wrapper.
- Designed and incorporated best-in-class features like Progress Tracking using detailed graphs and statistics, Achievements system to reward users based on their progress, customizable Reading Plans, daily Email and Push Notifications and more.

Stendhal Open Source Game | Eclipse, Git, Apache Ant, Jenkins, Junit and SonarQube

- 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.

Machine Learning | Matlab

 Developed a "Handwritten Digit Recognition" algorithm as part of Machine Learning coursework to classify the digits from 500 data samples and a "Spam Filtering" algorithm to distinguish between 'spam', 'non-spam' and 'uncertain' email messages.

SKILLS

Programming - Python, Java, HTML, CSS, Javascript, C, SQL, Matlab, Prolog.

Tools and Frameworks - Bash, Jupyter, Docker, MySQL, PostgreSQL, Redis, Apache, Nginx, Hadoop, Spark, Hive, Microsoft Office, Latex, IntelliJ, Atom, Eclipse, Sublime Text, Shell, Mac, Linux, Windows, Tensorflow, PyTorch, Flask, Django.

Cloud and Version Control - AWS, Google Cloud, Heroku, Git, Jira, Jenkins, Travis.

VOLUNTEERING

Volunteer | The Global Education and Leadership Foundation

2011 - 2013

Stayed in a village in Rajasthan, India and interacted with villagers(and their children), listened to and proposed solutions for their problems helped them in daily chores and encouraged them for a higher purpose in life.