SOUTRI MUKHERJEE

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Software Developer with hands on experience in Python, Java, C and C++ . Currently a computer science graduate student at Indiana University with proficiency in Linux Management tools/softwares, web server management, web applications development, database management and applied machine learning techniques. Also, Experienced in Database and Cloud based technologies.

EDUCATION

Indiana University, Bloomington, Indiana **August 2019**
Master's in Computer Science
G.PA.-3.66

Pune Institute of Computer Technology, Pune, Maharashtra **June 2016**
Bachelor of Engineering in Computer Engineering
CGPA: 7.9

TECHNICAL SKILLS

Languages: Python, Java, C, C++, R, HTML5, Scala, JavaScript, XML, PHP

Databases and Cloud Platforms: MySQL, MongoDB, Cassandra, Oracle, Hadoop, Openstack, AWS

Frameworks, Tools and Technologies: Angular, Nodejs, JQuery, Bootstrap, GULP, Qt, Tableau, PyCharm, IntelliJ, Selenium, Visual Studio, RStudio, Latex, VMware, Modelio, Eclipse, NetBeans

WORK EXPERIENCE

Accenture, Pune, India **November 2016 – July 2017**
Application Development Associate

- Worked for a Canada based client in Automation testing using Java and Selenium. Also developed and executed test scripts for functional testing.
- Automated monthly budget tracker, developed monthly reports on forecasting, communicated with the onshore client team to fulfill business requirements and develop business models. RTC, Coupa, Abacus, MME are other tools I've worked on.

Indian Oil Corporation, Kochi, Kerala **June 2014 – July 2014**
Summer Intern

Developed LFR, a tool that analyzes lube fuel ratio, sales growth and average sales of lubes and generate performance metric reports for business stakeholders. Technologies used: Java Server Side Programming, Java Applets, JDBC, Java Servlet, XML, JavaScript.

- **Data collection**: Designed and implemented jsp pages to fetch and load data from Oracle XE database.
- **Query tuning**: Worked on optimizing and tuning SQL Queries to improve performance and response time.
- **Data security**: Designed and implemented security features using cryptographic hash functions to protect sensitive information.

PROJECTS

Quantitative Analysis of Mobile Applications and Mobile Websites **May 2018**
Performed a comparative analysis of energy usage and data consumption of a mobile application client and web browser client for the same service and suggest methods to optimize mobile app performance. Awarded the best project for the course!

Emonet- A Real Time Emotion Detection Tool **May 2018**
Developed a Deep Convolutional Network architecture that extracts facial features of the user from a live video application and instantly returns their emotion with 87% accuracy.

Stock Prediction Using Social Media Data **April 2018**
Developed a model that predicts stock market trends from Twitter feeds. Developed LSTM+CNN and SVM models that uses human sentiment to predict stock behaviors for any set of companies.

Creating Multi-Image Panoramas **January 2018**
Developed a system that combines multiple pictures into a 360-degree panorama. This software detects uses SIFT features to perform feature matching. After warping and blending, the system presents a panorama image.

Xinu Embedded Operating System (Semaphore,Polling,Futures,ps,kill) **October 2017**
Assisted in fine tuning of the operating system. Improved on Xinu by manipulating their data structures and hence decreasing the OS processing time by 30%. Automated system calls for inter process communication. Implemented futures to allow synchronization of threads. Implemented the entire ext2 file system for xinu operating system.

OpenStack Resource Management Tool (vmstat, iostat, strace, netstat, top) **May 2017**
Automated the process of Multi-node Openstack ICE-house Deployment on Ubuntu Servers 14.04 nested on VMware ESXi 5.5. Further, contributed to open-source community by developing an easy-to-use UI-based tool that fetches real time monitoring results of the instances and their network activities.

XODIA **July 2016**
Developed an online AI gaming platform for ML Bots to fight against each other. Developed BASH scripts to automate the tournament and increased the difficulty level of the game by developing test bots using Dynamic programming (first version) and a hybrid algorithm (second version).