Soham Chakraborti

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Education

Carnegie Mellon Master of Information Systems Management, GPA: 3.78 Aug 2019 – Dec 2020

University Relevant Coursework: Cloud Computing, Data structures for Application Developers,

Pittsburgh, PA

Practical Data Science, Rapid Prototyping of Computer Systems (TA)

Jadavpur University B.E. in Information Technology, GPA: 3.75 Apr2011–May2015

Kolkata, India

Skills

Programming Languages: Python, Java, SQL, JavaScript, Scala

Software/Libraries: AWS, SQL, Git, Docker, Hibernate, Spring, Azure, Google Cloud Platform, NoSQL, Spark, Kafka, Samza

Certification: Professional Scrum Master 1

Academic Projects [Carnegie Mellon University]

CellOrganizer [Tools: Python, Docker, MATLAB]

- Building Dockerized version of compiled MATLAB binary with python wrapper for MATLAB functions to be used in Jupyter notebooks Hyatt VRAPP
- Architect the web portal of the VR app backend, that interfaced with the oculus VR to show insights from generated data. Social Graph Analysis [Tools: Spark, Scala, AWS]
- Implemented Page Rank and other analysis using Scala and Spark on a 1TB Data set.

New York Cab matching [Tools: Java, AWS, Kafka, Samza]

 Developed a Kafka and Samza based stream processing tool to match New York cabs to riders. As well as display relevant Advertisements to riders based on their interests.

Video Indexing Service [Tools: Python, AWS, AZURE, GCP]

• Developed Function as Service (Faas), to develop a video indexing service.

Multi-threaded Datacenter Consistency Handler [Tools: JAVA, Terraform]

• Developed a multi-threaded GET/PUT handler for data centers.

Cloud Webservice [Tools: AWS, Java, Undertow, Spring, Gson]

• Developed a cloud-based blockchain validation service using Undertow framework to achieve a throughput of 53,000 RPS for a test load. Ranked number 3 of 40 teams in the course.

Big Data Analysis [Tools: AWS, Java, MapReduce]

• Applied MapReduce on Wikipedia page views over a period of two months to rank top pages of the month.

Music Data Analysis [Tools: Pandas, Scikit-learn, Folium]

• Segmented and analyzed lyrics usage based on singer genders, and how they have evolved over the years.

Professional Experience

IPsoft Global Services Ltd., Senior Research and Development Engineer

Bangalore, India Jun 2016 – Jul 2019

- Developed an end-to-end Robotic Process Automation product called 1RPA, which introduced out of the box features unique to the Automation Industry. This leveraged Java and Microservice architecture design patterns.
- The solution was implemented for over 20 clients across the globe. It earned over \$1 million in revenue.
- Coded the 1RPA studio client and server interaction setup in Nodejs and Electron framework.
- Developed end to end stochastic dialogue management for our cognitive agent, Amelia, which was the first in the industry that could shift conversations and jump from one context to another.

Samsung Research Institute, Software Engineer

Bangalore, India Jul 2015 – Jun 2016

- Successfully delivered a network module for Samsung's internal IoT operating system.
- Developed OpenGL-based VR application for Tizen OS. This was showcased to the executives at headquarters.

Samsung Research Institute, Software trainee (Intern)

Bangalore, India May 2014 – Jun 2014

• Developed and deployed Samsung's proof of concept Wi-Fi TX/RX module and FM receiver module using open source software defined radio on USRP2 boards.