TUSHAR AHUJA

A software engineer with a passion for data
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EXPERIENCE

Software Developer – Barclays, New York   June 2018–Present
Risk Finance and Treasury – Barclays
- Helped build Big Data pipeline using Scala, Python, Apache Spark, Airflow, Kafka, and Amazon EMR ingesting and transforming data at scale
- Built REST API's for dependency management and metadata access using MongoDB, Scala and Java
- Implemented a POC using Apache Griffin to detect data quality issues and report it to the business in an automatic manner

Technology Summer Analyst – Barclays, New York   Jun–Aug 2017
Risk and Analytics - Barclays
- Created a Proof of Concept for a tool using Apache Spark that automates Mapping and Running a Quantitative Calculation reducing turnaround time for the client from 3 days to a less than 3 hours
- Implemented the tool as a full stack Web App with Scala Play as Backend and Angular JS on Apache Zeppelin as Front-End
- Designed a Web Dashboard which provided the tool access in a multi-tenant environment leading to a reduction in the number of meetings to almost zero for the team dealing with the process

EDUCATION

New York University Tandon School of Engineering
Master of Science in Computer Science, 3.5/4.0   **May 2018**

University of Pune, India   **Aug 2016**
Bachelor of Engineering in Computer Engineering, 3.8/4.0

ACADEMIC PROJECTS

Small Search Engine, *Web Search Engines* (https://goo.gl/AdXL4V)   **Sep–Dec 2017**
- Implemented a multi-threaded Web Crawler to crawl 8 million web pages at a rate of 500 URLs per second
- Built an inverted index from 8 million web pages, compressed the index using variable byte encoding leading to 30 percent smaller index size on disk
- Designed a DAAT query processor returning top 10 pages for 3-word queries under half a second

Detecting Twitter Bots, *Machine Learning* (https://goo.gl/4MUvQv)   **Jan–Mar 2017**
- Implemented ensemble Machine Learning Models to predict whether a Twitter user is a bot or not
- Tuned the model parameters and obtained an accuracy of 95% in predicting bots securing the 3rd rank in class Kaggle competition

Citi Bike Descriptive Analysis, *Big Data* (https://goo.gl/XjjfR2)   **Sep–Dec 2016**
- Performed Descriptive Data Analysis of Citi Bike Data sizing 40 Gb using Apache Spark and Python
- Created an R-tree index on geo-location data reducing analysis time from 30 minutes to under 3 minutes
- Built a story map to visualize the Analysis using ArcGIS (http://arcg.is/2qzEJzA)

SKILLS

Programming (Over 5000 Lines):	Scala, Python, Java, C/C++
Programming (Over 1000 Lines):	JavaScript, Dart
Web Development (Side Projects):	HTML, CSS, JavaScript, SQL, MongoDB
Tools:	AWS, EMR, Git, Kubernetes, Docker, SBT, Kafka, Jenkins