Mahesh Jindal

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EDUCATION

Columbia University New York, NY
M.S. in Data Science Dec 2022
Coursework: Data Structures and Algorithms, Machine Learning, Computer Systems, Neural Networks and Deep Learning (Research), Reinforcement Learning, Probability, Statistics and Inference Modelling, Data Analytics

Chitkara University Chandigarh, IN
*B.E. in Computer Science and Engineering; GPA:9.64/10;(Rank: **1st** out of **2000**)* Jun 2020
Coursework: Data Structures and Algorithms, Cloud and Distributed Computing, Software Engineering, Statistics, Machine Learning, Database Management Systems, Operating Systems, Discrete Mathematics, Engineering Mathematics.

WORK EXPERIENCE

FICO Bangalore, IN

Software Engineering - Engineer I (Data Science Department); Employee Recognition Award Jun 2021 - Aug 2021

- Developed an **event-driven application framework** (using Java, Kafka, Spring, AWS, DynamoDB, Kubernetes) to capture and monitor data events **from 15+ applications**. It also generates automated Tableau reports and sends alerts in case of any application malfunction. It helped in improving client services and **reducing labour costs by $400000**.
- Worked on a sentimental analysis model (**93% accuracy**) using **NLP and Data Modelling** on equity research reports required for generating a consumer risk score.

Software Engineering - Associate (Data Science Department); Employee Recognition Award Jul 2020 - May 2021

- Worked on the **backend architecture**, **supervised machine learning** and data wrangling **distributed algorithms** for a $3M project named "FICO Analytics Workbench" using Java, Scala, Kafka, Scalding, Spark, Zookeeper, AWS.
- Designed and developed an **AI-powered** machine learning **model using Neural Networks with ensemble methods** for generating optimal AWS infrastructure resource deployment configuration. It helped in reducing overall **AWS billing cost by $1M**.

Software Engineering - Intern (Data Science Department); SPOT Award Winner Mar 2019 - Jun 2020

- Created **RESTful web services** from scratch for managing and executing **Spark Batch Jobs, Data Streaming Jobs** using Java, Scala, Kafka, Hadoop, Spring and PySpark used by 15+ internal applications supporting multiple input and output data formats (AVRO, Parquet, JSON, XML, CSV).
- Worked on code refactoring, code coverage and unit testing of 4+ applications resulted in **application performance** improvement **by 30%** on average.
- Debugged and **resolved 60+ JIRA production issues** related to various software applications raised by the product owners without any backlogs.

LANGUAGE AND SKILLS

Programming Languages:	Java, Python, Scala, R, C++, SQL, CSS, HTML, JavaScript, JSON, XML, LaTeX.
Frameworks:	Spark, Kafka, Hadoop, Zookeeper, MapReduce, Spring Boot, Spring Cloud, PyTorch, NLTK, NumPy, Pandas, Scikit-Learn, Matplotlib, Scalatra, Seaborn.
Cloud Services/Orchestration:	AWS (S3, EKS, EMR, Sagemaker, EC2, Lambda, ELB, Route53, RDS, Kinesis, CloudWatch, Glue, Fargate, ECR, EBS, MSK), GCP, Docker, Kubernetes.
Databases:	MySQL, PostgreSQL, H2, DynamoDB, MongoDB, AWS Redshift.
Others:	REST, SOAP, Tableau, Git, GitHub, Jira, IntelliJ Idea, Bash Scripting, Jupyter Notebook, Jenkins, Maven, Tomcat, Hibernate, Linux, VM Virtualization

PROJECTS AND RESEARCH

Fake information detection in Social Networks using Graph Neural Networks & NLP [Link] Dec 2021

- Designed a deep learning framework to detect fake news/misinformation and susceptible nodes in social graphs. Data and Concepts: Twitter Dataset, Graph Neural Networks, Text Preprocessing, Text Embedding, Attention Mechanism and Algorithmic modelling; Technologies: Python, PyTorch, NumPy, Pandas, Matplotlib, NLTK, Tensor Board.

Automated Travel and Expense Management System - Software and Analytics [Link] Nov 2020

- Collaborated with 4 team members and developed software to automate travel ticketing and expense management system; Technologies: Java, Spring Boot, Google Firebase, PyTorch, Maven, Docker, MySQL, Bash Scripting.
- Created a Google Analytics dashboard and time series ML model to predict average monthly expenses.