# Srujit Varasala

#### New York

# Professional Summary

Big Data Engineer with almost 3 years of experience in designing, developing, and optimizing large-scale data pipelines and ETL processes. Proficient in Apache Spark, Hadoop, and cloud technologies, with a focus on improving data processing performance and delivering high-quality insights. Experienced in handling terabytes of data and managing data integration across distributed systems. Adept at working with Python, PySpark, and Scala to drive efficiency and scalability in data operations.

#### Technical Skills

Big Data Technologies: Apache Spark, Hadoop, HDFS, Airflow, ETL pipelines, MongoDB, Neo4j

Programming Languages: Python, Spark (PySpark), Scala, Java

Databases: SQL, PostgreSQL, MongoDB, Neo4j

Cloud & DevOps: AWS, Docker, CI/CD pipelines, Git, GitHub

Data Processing Tools: Apache Kafka, Spark Streaming Testing & Automation: Unit Testing (JUnit, PyTest)

### Experience

#### Client: DLK Technologies Private Limited

Nov 2018 - Dec 2018

Full Stack Web Development Intern

Chennai, Tamil Nadu

- Description: Worked on end-to-end development of web applications, starting from frontend design with HTML to the deployment of the application. Contributed to various stages of the development lifecycle, gaining experience in both frontend and backend development.
- Responsibilities:
- Developed and maintained full-stack web applications using Django, improving overall performance and usability for client websites.
- Built and managed models, views, and templates for dynamic web pages, reducing database query times by 20%.
- Created and integrated REST APIs to streamline data flow, reducing latency and improving response times by 15%.
- Designed and implemented responsive UIs using HTML, CSS, JavaScript, and Bootstrap, leading to a 30% increase in mobile compatibility.
- Performed CRUD operations to maintain high data integrity, reducing data inconsistencies by 10%.
- Collaborated with team members using Git for version control, leading to the successful deployment of 5+ new features over 2 months.
- Debugged and optimized web applications, cutting page load time by 25% and resolving critical bugs in real-time.

## Client: Techniki services Startup

Aug 2019 - Dec 2019

Hyderabad, Telangana

• Description: Worked on end-to-end development of web applications, starting from frontend design with HTML to the deployment of the application. Contributed to various stages of the development lifecycle, gaining experience in both frontend and backend development.

• Responsibilities:

Full Stack Developer Intern

- Developed and maintained web applications using HTML, CSS, JavaScript, and Bootstrap, enhancing cross-browser compatibility and responsiveness by 30%.
- Built and integrated REST APIs, improving communication between frontend and backend systems, reducing response time by 20%.
- Optimized backend logic and database management using Java, reducing server load by 15% and improving database efficiency.
- Led deployment processes using **Docker** and **CI/CD**, reducing deployment time by 50% and ensuring consistent production environments.
- Debugged, tested, and optimized web applications, reducing load times by 25% and minimizing downtime during releases.

• Collaborated with cross-functional teams, delivering 3 key projects on schedule over 4 months, ensuring smooth production deployment.

#### Client: Jio Platforms Limited

July 2020 - December 2022

Biq Data Engineer

Bengaluru, Karnataka

- Description: Jio Platforms Limited is a leader in telecommunication services all over India and digital services providers, Providing businesses and consumers with Telecommunication services insights. I worked as a big data engineer on the JAMP (Jio Audience Management Platform) team. Managed data pipelines, and ETL processes, optimizing performance and ensuring seamless data integration across various platforms.
- Responsibilities:
- Designed and developed scalable data pipelines using Apache Spark, Python, and Spark Scala to process 10+ million records daily, reducing processing time by 40% and boosting data accuracy by 30% through automated data quality checks and data cleansing routines.
- Built and maintained batch processing systems for 1TB of data daily using Apache Hadoop, HDFS, and Airflow, ensuring seamless data integration.
- Developed and deployed the **Jio Maps** project, integrating geographic data from **Google Maps**, **HERE Maps**, and **OpenStreetMap**, increasing user navigation accuracy by 20%.
- Improved navigation accuracy by 20% through integrating 1B+ places of interest.
- Gathered geographical data via API keys and Python scripts, utilizing Neo4i for data analysis and visualization to uncover relationships, while using **MongoDB** for accurate and relatable mapping.
- Created efficient ETL pipelines using Python and Airflow, integrating data into Oracle databases, improving data reliability and flow.

### **Projects**

Real-Time IoT Insights Hub | Apache Kafka, Spark Streaming, HDFS, Python

March 2023 - June 2023

- Developed a real-time data streaming platform using **Apache Kafka** and **Spark Streaming**, processing over 2TB of incoming data daily from multiple IoT devices across the globe.
- Integrated with **HDFS** for scalable data storage and archiving, improving data accessibility and redundancy.
- Optimized the streaming architecture, reducing data processing latency by 30%, ensuring real-time decision-making for connected devices.
- Created automated ETL pipelines for cleaning, transforming, and loading data into a data warehouse, enabling efficient business analytics.

Places of Interest | Apache Spark, Python, Neo4j, MongoDB, HDFS

January 2023 - May 2023

- Built a data pipeline for ingesting, processing, and analyzing geo-location data to provide real-time location-based insights. Used Apache Spark for large-scale data processing and Neo4j for graph-based data storage and analysis.
- Processed over 500GB of geo-location data using Apache Spark, enabling faster real-time analysis and insights generation.
- Stored data in **Neo4**; to build and analyze spatial relationships and networks, improving data retrieval times by 30%.
- Developed queries in Cypher to visualize connections between geographical entities, such as restaurants, hotels, and user activity points.
- Achieved a 20% increase in processing efficiency by optimizing data loading from MongoDB into Spark.

Web Data Scraping and Analysis | Python, Beautiful Soup, Hadoop, MapReduce, HDFS, Mongo DB September 2020

- Developed a Python-based web scraper using **BeautifulSoup** to collect data from multiple websites, extracting information such as product prices, reviews, and ratings.
- Processed over 1TB of unstructured data using **Hadoop MapReduce**, improving data processing efficiency by 60%.
- Stored the cleaned data in HDFS and MongoDB for scalable and quick retrieval.
- Analyzed data using MapReduce and visualized key insights, such as price trends and product ratings, using Matplotlib and Seaborn.
- Achieved a 50% reduction in data processing time by leveraging distributed computing.

#### Education

New Jersey Institute of Technology

Newark, NJ

Jan 2023 - Present

Master of Science in Computer Science

CGPA: 3.0

SRM Institute of Science and Technology

Chennai, Tamil Nadu Aug 2016 - May 2020 CGPA: 3.2

Bachelor of Technology in Computer Science and Engineering