Sunil Meena

9672135908 Sunilmeena00t@gmail.com linkedin.com/in/sunil-meena/

EDUCATION

Indian Institue Of Technology, Bombay **Mumbai**
B.Tech. in Electrical Engineering CGPA: 8.0/10.0 *Graduation: 2017-2021*

Courses
Data Structures and Algorithms, Fundamentals of Digital Image Processing, Foundation of Intelligence and Learning Algorithms, Advanced topics in Deep Learning, Speech and Natural Language processing

SKILLS

Language: *Java, Python, C++, HTML, CSS, JavaScript*

Tools: *Elasticsearch, Redis, Kibana, Apache Kafka, Apache Spark, Docker, HDFS, PyTorch PostgreSQL,* Ray, Pandas, Hugging Face, LangChain, scikit-learn, OpenCV, LabelMe, Jenkins, Postman

WORK EXPERIENCE

Jio Platforms Limited **Mumbai**
Software Developer | Manager *June 2021 - Present*

Java and REST APIs
- Used multi-threading to optimize computations and decrease latency by 40% in turn increasing the application throughput by 20%.
- Engineered statistical dashboard pages displaying data on network hierarchy allowing the management team to prevent connection outages reducing customer churning by 15%.

Big Data
- Leveraged Apache Spark to enhance application performance by 50% by offloading computationally intensive tasks to dedicated Spark-based microservice.
- Created spark jobs for pre-computation and data compaction on data records to provide concise data for scheduled report generation reducing query computation time by 60%.

Databases
- Designed and deployed Elasticsearch clusters (small, medium, and large) to accommodate varying data volumes, ensuring optimal resource allocation based on node roles.
- Managed ES clusters by providing appropriate shard allocation strategies, ensuring data redundancy through replica shards, and performing rolling restarts to minimize downtime.
- Improved existing response time by 32% by implementing in-memory caching using Redis and composite aggregations for serving requests with similar unique keys.

Machine Learning and Ray
- Designed an LLM-based chatbot that offers auto-suggested questions and utilizes Redis for caching frequently asked Q&A for faster responses.
- Enhanced the Retrieval-Augmented Generation (RAG) pipeline by incorporating a cross-encoder-based re-ranking model and implementing chunk indexing for improved performance.
- Developed a high-efficiency spam SMS detector by employing an ensemble of classifiers (KNN, SVM, Logistic Regression, etc.) with embedding feature vectors achieving an average F1-Score of 0.99 and processed 3600 inferences per second (TPS) using optimized ONNX weights.
- Leveraged Ray Serve Library in multi-GPU serving model to provide an API endpoint for question-answering inference using LLMs.

ACADEMIC PROJECTS

Domain Adversarial Learning of Neural Nets *Feb 2020 – July 2020*
- Build Domain Adversarial Neural Network(DANN) to obtain optimized features that are domain indiscriminate but classify the images into correct labels

Semi-Supervised Mammograms Classification *Jan 2020 - April 2020*
- Implemented Jigsaw Puzzle Reassembly, a Self-Supervised task, for learning the general-purpose features from the Mammograms improving the classification performance by 40% in comparison to the supervised process.