RIGVED MANOJ

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EDUCATION

University of Massachusetts, Amherst   **May 2025 (Expected)**
Master of Science in Computer Science   *CGPA 4.0/4.0*
Courses: Machine Learning, Reinforcement Learning, Natural Language Processing

National Institute of Technology, Tiruchirappalli   **Jun 2020**
BTech in ECE (Minor in Computer Science)   *CGPA 7.25/10.0*
Courses: Pattern Recognition, Big Data, Data Structures and Algorithms, Database Management

SKILLS

Languages and Tools: Python, BASH, Scala, SQL, Git, Django, Hadoop, Hive, Spark, Kubernetes

Expertise: Data Modeling ,Schema Design, Database Management, Data Pipeline Architecture

EXPERIENCE

VISA

Senior Data Engineer   **Mar 2023 - Jul 2023**
- Implemented a scalable, fault-tolerant data ingestion pipeline utilizing **HDFS, Spark,** and **Scala** for distributed processing and data manipulation, handling **15 million daily transactions**.
- Identified and resolved a data discrepancy across data centers, preserving **$240k** in revenue through **root cause analysis**, data lineage exploration, and code review.

Data Engineer   **Oct 2020 - Mar 2023**
- Created a modular, high-performance ETL tool with **Python** and **Hive** to automate data extraction and transformation across applications, achieving a **43% reduction** in code redundancy and a **10% decrease** in resource utilization.
- Spearheaded the implementation of a scalable, config-driven utility for **automating** data pipeline testing, resulting in a **32% reduction** in manual testing workload.
- Successfully **remediated 3 years of data** inconsistencies involving **10 billion records** through data lineage analysis, business logic refactoring, incremental data backfilling, and continuous monitoring to avoid disruption to end users.
- Designed a Scala-based data migration solution leveraging **Kubernetes** for transferring **500 million records** to a new environment, enhancing data security through personal information field hashing.

Data Science Intern   **May 2019 - Jul 2019**
- Built a full-stack forecasting application with React, Django, and Facebook's Prophet for predicting transactional data, achieving an **18% accuracy improvement** in anomaly detection.

PUBLICATIONS

AMD Detection with CNN   **Elsevier, 2020**
- Developed a multiscale CNN with 6 convolutional layers to extract and integrate local and global features, employing random forest classification for **high-accuracy outcomes exceeding 96%** across diverse datasets.

RPE Recognition in Retinal OCT   **Elsevier, 2020**
- Innovated a novel approach utilizing contrast enhancement and pixel grouping to extract RPE layer and baseline from retinal OCT images for AMD diagnosis, achieving a **96.66% accuracy** on a dataset of **2130 images**.

PROJECTS

Priortized Sweeping in BlackJack
- Implemented the Prioritized Sweeping algorithm in Python for Blackjack, resulting in a 70% win rate across 100 gameplays.

InstaHire (Job Board)
- Designed a React and Django-based full-stack web app, employing RESTful APIs for a single-click Job-Board platform.

Reverse Chess
- Led a 5-person team in developing a Python and Tkinter-based chess GUI with reverse rules, incorporating the Min Max algorithm, resulting in an AI opponent achieving an 80% win rate.

ACHIEVEMENTS

Visa Go Beyond Recognition: Received 10+ recognitions for exceeding expectations in delivering exceptional results.

ICPC India Regionals Qualification: Qualified for regionals twice, securing ranks of 282/3282 and 185/4401 participants.