

RAJA ANKUSH REDDY

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EDUCATION

Indiana University Bloomington

Master of Science, Computer Science

Aug 2023 - May 2025

GPA: 3.97/4

Vellore Institute of Technology

Bachelor of Technology, Computer Science and Engineering

July 2018 - May 2022

CGPA: 9.07/10

WORK EXPERIENCE

Indiana University Bloomington

Bloomington, Indiana

Data Engineer - Research Assistant

Mar 2025 - Present

- Designed scalable ETL pipelines to process 500K+ records from Glassdoor (JSON) and LinkedIn (Parquet).
- Generated employer-level descriptive analytics summarizing temporal insights from 500K+ raw review data.
- Built a full-stack React + Spring Boot application using OpenAI API to extract insights from academic papers.
- Automated personalized feedback generation with GPT-4o-mini via Python-Spring Boot integration.

Concurrent LLC (Martha AI)

Bloomington, Indiana

Software Engineer

Oct 2024 - Feb 2025

- Architected user onboarding flow for an AI ad optimization platform, boosting activation rate by 18%.
- Designed 15+ conversational AI prompts to capture user intent and generate tailored ad recommendations.
- Improved UI through custom dashboards and optimized user management components for better usability.

NatWest Group (Royal Bank of Scotland)

Chennai, India

Software Engineer

July 2022 - July 2023

- Migrated financial application from SAS to AWS, enabling scalable pipelines and boosting performance by 30%.
- Implemented and deployed ETL pipelines using Python, PySpark, and Airflow for 100+ GB of financial data.
- Delivered system access for 20,000+ internal users with secure role-based access and governance compliance.
- Reduced incident rate by 25% through implementation of quality assurance and monitoring tools.
- Collaborated with business analysts and 3 engineering teams to translate data into insights, driving risk strategies.

Shiash Info Solutions Pvt.Ltd

Chennai, India

Data Engineer

Jan 2022 - June 2022

- Created a resume parser with NER that cut HR screening time by 50%, improving efficiency by 80%.
- Engineered Emotion Detection model via NLP achieving 85% classification accuracy on user feedback data.
- Streamlined processing of 1,000+ real-time inputs/second through model and I/O optimization.

TECHNICAL SKILLS

Programming Languages

Java, Python

Data Engineering

ETL, Data Warehousing, SQL, Data Modeling, Data Governance, Airflow, EDA, NLP

Frameworks/Libraries

Pandas, NumPy, Scikit-Learn, PySpark, NLTK, spaCy, Matplotlib, Tensorflow

Cloud and Databases

AWS, MySQL, MongoDB

Developer Tools

Git, VS Code, Google Colab, Jupiter Notebook, PowerBI, Tableau, Docker, Anaconda

PROJECTS

Predictive Analytics for Mental Health Trends in Tech | *ETL, Data Analytics, ML, Data Visualization*

- Architected full ML pipeline to detect mental health risks in tech industry, achieved 92% classification accuracy.
- Engineered SQL-based data pipelines processing 100K+ survey records for data transformation and validation.
- Constructed Power BI dashboards with 10+ visualizations highlighting prediction trends and KPIs for stakeholders.

Hospital Resource Optimization System | *Python, SQL, Apache Airflow, PostgreSQL, Pandas, Docker*

- Built ETL pipelines integrating patient flow, bed occupancy data etc from 15+ hospital departments using Python.
- Developed data processing workflows with Apache Airflow handling 50,000+ daily patient records with 99% accuracy
- Implemented predictive analytics models for emergency room optimization, reducing patient wait times by 40%.
- Created automated alerting system for resource shortages and deployed solution using Docker with 99.8% uptime.