MURAPAKA HEMA KALYAN

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PROFESSIONAL EXPERIENCE

ZoomRx Healthcare Technologies, Associate | Remote

July 2024 - Present

- Extracted and analyzed structured/unstructured medical data from 20+ conferences, enabling real-time decision making using GCP-based pipelines.
- Optimized conference data processing scripts, improving computational efficiency by 30%.
- Developed prioritization algorithm, aligning research with client needs and reducing classification errors by 90%.
- Fine-tuned open-source LLMs (Llama-2) for entity extraction, improving accuracy to 95%.
- Employed OpenAI API with Multithreading to summarize the medical research and to extract medical entities.
- Analyzed user feedback on social data for client-specific drugs, increasing report accuracy by 30%

Hippo Cloud Technologies, Data Science Intern | Visakhapatnam

Jun 2023 - Oct 2023

End to End Movie Recommendation Systems:

- Led a team of 7 interns, enhancing their skills in efficient modeling and effective data pre-processing techniques.
- Automated project lifecycles by creating data pipelines, reducing processing time by 50%.
- Conducted research and executed diverse end-to-end projects across different domains and use cases.

PROJECTS

OpenHealth: A Comprehensive AI Tool for HealthCare - GitHub Link

- Leading a team in developing an end-to-end SaaS application for remote healthcare with MLOps integration.
- Cleaned, normalized, and transformed 10K+ patient records, boosting model performance to 93%.
- Embedded Retrieval Augmented Generation Pipeline to communicate with Medical Reports.
- Deployed the model in AWS Elastic Beanstalk, Implementing CI/CD pipelines using AWS codepipeline.

Visa-Insight: End-to-End Visa Approval Prediction – GitHub Link

- Designed, scalable, modular pipelines using Gradient Boosting and Gridsearchev, achieved 95% accuracy in visa prediction models
- Efficiently managed and optimized data retrieval from MongoDB server to ensure seamless integration.
- Used DVC for reproducible data versioning and ML pipeline tracking across experimentation stages.

TECHNICAL SKILLS

- **Programming**: Python, SQL, R
- Machine Learning: Scikit-learn, Langchain, OpenAI, XGBoost
- Databases: MySQL, MongoDB
- Cloud Technologies: AWS (EC2, S3, Elastic beanstalk), Google Cloud Platform (GCP), Azure Cloud
- Libraries: NumPy, Pandas, Scikit-learn, Matplotlib, Langchain
- Big Data & MLOps: DVC, MLFlow, Docker, Evidently, Jenkins, Kubernetes, Hadoop, PySpark, Airflow
- Data Visualization Tools: Microsoft Power BI, Tableau
- Version Control: Git, GitHub, GitLab
- Office Tools: Microsoft Excel

EDUCATION

• B. Tech in Information Technology CGPA: 8.23, GMR Institute of Technology, Rajam	2020 - 2024
• Intermediate CGPA: 9.4, Sri Chaitanya Junior College, Srikakulam	2018 - 2020
• Class X CGPA: 9.7, Ravindra Bharathi School, Srikakulam	2017 - 2018

ACHIEVEMENTS

- Earned LinkedIn's Top Data Science Voice badge (Top 2%) for consistent thought leadership and community engagement.
- Recognized as the Best Data Science Content Writer in college for my open-source contributions.
- Delivered 10+ workshops and seminars on AIML topics, mentored 300+ students with a rating of 4.7/5.