Saichandar Rao Uppuganti

Data Scientist

Email: uppuganti2000@gmail.com   **LinkedIn:** linkedin.com/in/uppuganti   **Mobile:** +17182852860

SUMMARY

Data Scientist with experience in healthcare claims auditing, applying machine learning and LLM-based solutions to improve audit accuracy, reduce audit timing and data-driven decision-making. Skilled in training and validating predictive models using Python and advanced analytics techniques. Strong background in SQL development, including writing complex queries, optimizing performance, and managing relational databases. Experienced in building scalable ETL pipelines with SSIS and Python to support reliable data workflows. Comfortable collaborating with ML engineers and cross-functional teams to deploy and monitor models in production environments. Familiar with AWS/Azure platforms and Agile development practices.

TECHNICAL SKILLS

- **Programming Languages:** Python, C#
- **AI / NLP:** GPT-4, BERT, Transformer Models, Prompt Engineering, Google Document AI
- **Machine Learning & AI:** Model Training & Validation, Cross-Validation, Logistic Regression Model
- **Data Science Libraries:** NumPy, Pandas, SciPy, Scikit-learn, PyTorch, Transformers
- **Web Development:** HTML, CSS, Angular, Streamlit
- **Databases:** SQL, MSSQL, MySQL, PostgreSQL, SQLite, ClickHouse
- **Vector & Search Databases:** Elasticsearch
- **Cloud Platforms:** AWS, Azure
- **Frameworks:** Django, .NET
- **DevOps Tools:** Docker, Kubernetes, Jenkins
- **Operating Systems:** Linux, Windows, macOS
- **Data Visualization:** Power BI, Mode, Tableau
- **ETL Tools:** SSIS
- **Analytics Tools:** SSIS, AWS Glue
- **Version Control:** GitLab, GitHub

PROFESSIONAL EXPERIENCE

Medintelx

Data Scientist   August 2025 – Present

Technologies: Python, Transformer Models, Prompt Engineering, OCR (Tesseract), Streamlit, ETL Pipelines, SQL, T-SQL, MSSQL, SSIS, SSMS, SSRS, BERT, GPT-4, Azure, Transformer Models.

- Designed and implemented an end-to-end AI-driven claims auditing system that automated document extraction, classification, and validation of healthcare claims, reducing manual review effort by 30-40%.
- Built a Python-based pipeline to process scanned and electronic PDFs using OCR (Tesseract) with preprocessing enhancements for improved accuracy.
- Developed a BERT-based document classification model to categorize claim documents before audit processing.
- Improved document classification accuracy to 90% and fine-tuning a BERT-based model on labeled healthcare claim datasets.
- Implemented structured prompt engineering techniques (few-shot prompting, JSON schema constraints) to improve extraction consistency and reduce LLM hallucination.

- Implemented automated ICD approval logic using GPT integrated within a Streamlit-based auditing interface.
- Designed SQL schema with indexing, constraints, and validation checks to ensure data integrity and audit traceability.
- Implemented logging, retry mechanisms, and validation layers to ensure production-grade reliability.
- Designed and implemented an AI-driven SQL function generation tool using GPT, enabling automated creation of database functions from natural language prompts and improving developer productivity.

Svastha Infotech   Feb 2025 – July 2025
AWS SQL Developer
Technologies: SQL, SSIS, SSMS, SSRS, AWS, AWS Cloud watch, T-SQL, C#, MSSQL, MSBI, Data Analytics, BI Tools

- Wrote complex SQL Queries, Stored Procedure, Triggers, Views & Indexes using DML, DDL commands and user defined functions to implement the business logic.
- Advised optimization of queries by looking at execution plan for better tuning of Database.
- Performed Normalization & De-normalization on existing tables for faster query results.
- Wrote T-SQL Queries and procedures to generate DML Scripts that modified database objects dynamically based on inputs.
- Created SSIS package to import and export data from various CSV files, Flat files, Excel spread sheets and SQL Server.
- Designed and developed different types of reports like matrix, tabular, chart reports using SSRS.
- Involved in migration on SQL Server 2019 databases to SQL Server 2022.
- Maintained positive communication and working relationship with all business levels.
- Coordinating with onshore/offshore & stake holder's team for task clarification, fixes and review.
- Reviewed, analyzed and implemented necessary changes in appropriate areas to enhance and improve existing systems
- Optimized data pipelines to ensure scalability, reliability, and high-performance data processing.

Movate   July 2022 – Nov 2022
Cloud Engineer
Technologies: AWS, EC2, S3, EBS, IAM, GitLab, Python, MS Excel, SQL, HTML, AWS CloudFormation.

- Working knowledge of AWS services, such as Elastic Compute Cloud (EC2), Elastic Block Storage (EBS), and Simple Storage Service (S3).
- Utilized infrastructure-as-code tools like Terraform and AWS CloudFormation to automate deployments.
- Created users and groups using IAM and assigned individual policies to each group.
- Performed detailed data analysis and reporting with MS Excel and SQL, providing actionable insights for decision-making.
- Setup and attached/detached EBS volumes to EC2 instances, managed security groups, VPC specific to the environment
- involved in maintenance and performance of Confidential instances.
- Proficient in scripting languages like Python, Bash, and PowerShell for troubleshooting complex systems.
- Involved in designing and developing Confidential, Amazon S3, Amazon RDS, Amazon Elastic Load Balancing, Amazon SQS, and other services of the AWS infrastructure
- Deployed and managed containerized applications using Docker and Kubernetes on AWS ECS/EKS.
- Implemented robust monitoring solutions with AWS CloudWatch to optimize system reliability and performance.

EDUCATION

Master of Science in Computer Technology

Eastern Illinois University, Charleston, IL   Jan 2023 – May 2024
GPA: 4.0/4.0

Bachelor of Technology

Jawaharlal Nehru Technological University, Hyderabad, India   June 2019 – June 2022
GPA: 7.5/10

PROJECT

Eastern Illinois University   Mar 2023- May 2024

Healthcare Data Breach Visualization Dashboard
- Built an end-to-end data analysis solution to track healthcare data breaches using real-world datasets.
- Used Excel for cleaning data and SSIS to create ETL pipelines that loaded data into MS SQL Server.
- Designed and implemented optimized SQL stored procedures and indexed tables to improve query performance and reduce report generation time.
- Automated data refresh processes and scheduled ETL jobs using SQL Server Agent to ensure timely and consistent dashboard updates.
- Wrote SQL queries and views to get data ready for reporting and analysis.
- Created detailed reports with SSRS and developed interactive dashboards in Power BI to show breach trends by type, location, and frequency.
- Applied data validation and transformation techniques to ensure clean, accurate, and usable data for reporting.
- Gained hands-on experience in designing data models and managing real-time business reporting needs