Amarnath Reddy Malkireddy

Albany, NY | Open to Relocation
Phone: +1 (838)200-7053 | Email: anrmalkireddy@gmail.com
LinkedIn/amarnath-reddy-malkireddy | GitHub.com/amarnathreddy1877

Professional Summary

- Data Analyst with 4+ years in healthcare and financial services, specializing in data integration, dashboard development, and regulatory reporting.
- Advanced in SQL, Python, and SAS with strong BI (Tableau, Power BI) and modern data stack experience (dbt, Snowflake) on GCP and AWS.
- Translate large-scale clinical (EHR, claims) and trading data into actionable insights that improve healthcare access, financial transparency, and operational KPIs.
- Apply AI/ML (risk prediction, cohort modeling, NLP, LLM-based automation) and communicate clearly with cross-functional stakeholders to drive revenue, reduce cost, and elevate customer experience.

Skills

Programming: Python (Pandas, NumPy), SQL (CTEs, window functions), SAS
BI & Visualization: Tableau (Row-Level Security), Power BI (DAX, Dataflows), IBM Cognos, Excel (Power Query, PivotTables), matplotlib, seaborn
Data Platforms: Google BigQuery, Amazon Redshift, Snowflake, PostgreSQL, MySQL, SQL Server
Cloud & Tools: Google Cloud (BigQuery, Cloud Functions, Cloud Scheduler, IAM), AWS (S3, Glue, Redshift, Lambda), Git/GitHub, dbt
Analytics & ML: Regression, Classification, Clustering, Anomaly Detection, Survival/Time-to-Event, Risk Stratification, Forecasting, Time-Series, A/B Testing, Cohort/Funnel Analysis
Security & Compliance: HIPAA (PHI handling), GCP IAM, Tableau RLS, CDC/CMS reporting, data governance & access control
Healthcare Domain: Epic/MyChart (EHR), Immunization Registry, Medicaid claims, HEDIS, SDOH, **Health Data NY (HDNY)**
Banking & Risk Domain: Fraud analytics, AML/KYC, Basel III, risk scoring, loan performance analytics
Data Quality: Data cleaning/standardization, reconciliation controls, validation & QA
Soft Skills: Cross-functional communication, stakeholder engagement, requirements gathering, agile delivery, executive-ready reporting & training

Projects

Data Quality Guardian — Row-Level Data Quality Analyzer
GitHub: `https://github.com/amarnathreddy1877/data-quality-guardian`

- **Summary:** Built an end-to-end **Streamlit** app that profiles **CSV** datasets to flag **missing values**, **duplicate records**, and **numeric outliers** via an adaptive **IQR/Z-score** approach. Generates clear, row-level, **downloadable reports** to accelerate data triage and fixes.
- **Responsibilities:** Designed and implemented the **data-quality engine** (missing/duplicates/adaptive outliers) and an **interactive UI** with filtered issue views and **CSV/text** exports; authored concise **documentation** and **sample datasets** for review.
- **Tools:** Python (Pandas, NumPy), Streamlit, Git, GitHub

Job Alerts — Entry/Mid Data Analyst (US)
GitHub: `https://github.com/amarnathreddy1877/job-alert-bot.git`

- **Summary:** Automated **hourly email digest** of new **U.S. data-analyst** roles using official **ATS JSON APIs**; **filtered**, **deduplicated**, and delivered via **SendGrid**; orchestrated on **GitHub Actions**.
- **Responsibilities:** Implemented **ATS ingestion**, **keyword filters**, **U.S./Remote-US location rules**, and a **30-day de-dup cache**; produced **grouped HTML emails** and scheduled hourly runs with **GitHub Actions**; documented setup (**API keys/secrets**) and troubleshooting steps (e.g., **SendGrid 401**).
- **Tools:** Python, REST/JSON, GitHub Actions, SendGrid, ATS APIs

Professional Experience

Bioinformatics Data Analyst   May 2024 – Present
New York State Department of Health (Employer: US Tech Solution LLC)   Albany, NY

Deliver analytics for long-term care across data engineering, intake, analysis, data architecture, BI, and decision support. Build **Tableau** reporting for surveillance, vaccine uptake, **HEDIS**/quality, and **SDOH**; automate **Python/SQL/BigQuery** pipelines integrating **EHR (Epic)**, immunization registry, **Medicaid claims**, and lab data; implement **HIPAA**-aligned controls (**PHI**, **GCP IAM**, **Tableau RLS**) and support **CDC/CMS/HDNY** reporting.

- Build and maintain **15+ Tableau dashboards** (surveillance, quality, **SDOH**), improving stakeholder decision speed by **60%**.
- Automate **12 ETL workflows** and **10+ Cloud Scheduler** pipelines; publish **25+ SQL views** for near-real-time monitoring, reducing manual refresh work by **70%**.
- Standardize **CMS** submissions and **Health Data NY (HDNY)** extracts (schemas, data dictionaries), cutting submission prep time by **75%** and resubmission fixes by **40%**.
- Link **nursing home cost reports** to **staffing**, **quality**, and **utilization** metrics; deliver monthly variance views that cut reconciliation time by **40%**.
- Operationalize **nurse staffing shortage determination** measures (**HPPD**, vacancy, overtime%, turnover); automate monthly facility flagging, reducing manual review time by **60%**.
- Apply **SQL window functions** and **time-to-event** logic for patient-level trends; accelerate outbreak/case response reporting for LTC partners.
- Model **1M+ records** (**R**, **SAS**, **scikit-learn**); regression across **750K+ Epic/MyChart** patients and **clustering/risk stratification** improved preventive-care outreach by **33%**.
- Enable secure analytics for **500+ users** with **HIPAA**-first access (**GCP IAM**, **Tableau RLS**); introduce **LLM-based report templating** to cut analyst write-up time by **50%**.

Data Analyst (Graduate Assistant)   May 2022 – August 2022
University at Albany   Albany, NY

Supported institutional research with data prep, analysis, and self-serve reporting.

- Built **5 Excel/Power Query** dashboards for enrollment and budgeting across **3** departments, improving planning visibility.
- Cleaned and standardized **100K+** SIS records using **Python/SQL**, improving data quality by **25%**.
- Migrated **15** legacy Excel reports to **IBM Cognos** with dynamic filters, reducing report delivery time by **40%**.

Application Development Analyst   May 2019 – December 2021
Accenture   Hyderabad, India

Supported a retail/consumer banking client across **fraud analytics**, **AML/KYC** monitoring, and regulatory reporting; engineered high-volume **SQL/ETL** on **AWS Redshift/Glue** and **Snowflake**; and built **Power BI/Tableau** reporting for fraud trends, risk scoring, loan performance, and compliance KPIs (Stack: **SQL**, **Python**/scikit-learn, **Power BI/DAX**, **Tableau**, **AWS Redshift/Glue**, **Snowflake**, **dbt**).

- Built and optimized **ETL pipelines** on **Redshift/Glue** and **Snowflake** processing millions of transactions/day, cutting reporting latency by **80%** via **SQL tuning** and optimized scheduling.
- Deployed **anomaly detection** and **clustering** on transaction/account data to flag high-risk activity, improving detection accuracy and reducing false positives for investigators.
- Implemented **reconciliation controls** and **data-quality checks** achieving **99.9%** transaction-validation accuracy, safeguarding **$20M+** in daily consumer banking activity.
- Automated **regulatory** and **reconciliation** reporting in **Power BI/Tableau**, saving **15+ analyst hours/month** and strengthening **AML/KYC** and **Basel III** audit readiness.
- Resolved cross-system inconsistencies with rule-based validation in **SQL/AWS ETL**, reducing reconciliation errors by **22%** and improving downstream **risk reporting**.
- Partnered with **fraud**, **risk**, and **compliance** teams to tune thresholds and KPIs; enabled **same-day triage** via dashboards with clear alert rationales.

Education

M.S. in Data Science, University at Albany, SUNY	Jan 2022 – Dec 2023
B.Tech in Electronics & Communication, GITAM University, India	Jun 2015 – Apr 2019

Certifications

- Python for Data Science, AI & Development – IBM
- Data Visualization with Excel and Cognos – IBM
- Microsoft AZ-900: Azure Fundamentals