

Golam Hisham

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SUMMARY

AI/ML engineer turning raw data into **client-ready insights** via **predictive modeling** (Scikit-Learn), **NLP**, **statistical analysis**, and **data mining**; end-to-end **data engineering** (ETL, data lakes), **feature engineering**, **model validation**, **cross-functional collaboration**, and on-time **dashboard** delivery.

EDUCATION

Rhodes College

B.S. in Computer Science, Minor in Statistics, GPA: 3.4

Memphis, TN

Aug 2022 – May 2026

TECHNICAL SKILLS

Languages: Python, SQL, Java, C++, R, Bash

ML/AI: Scikit-Learn, Hugging Face, Transformers (BERT, DistilBERT), NLP pipelines, GANs, LSTM, ARIMA, TimeGAN, predictive modeling, statistical analysis, model validation, data mining, big data technologies, dashboards

Data/Backend: PostgreSQL, SQLAlchemy, ETL pipelines, schema design, query optimization, data lakes, data ingestion

Cloud & DevOps: AWS (EC2, S3, IAM, VPC, Redshift), Docker, Kubernetes, Git, GitHub Actions, Linux

EXPERIENCE

Research Assistant – Generative AI for Noise-Resilient Forecasting

Jan 2025 – Present

Rhodes College

Memphis, TN

- Designed and evaluated **regression-GAN** and **Scikit-Learn** baselines to improve **noise-robust forecasting**; ran **statistical tests** and error diagnostics to validate model performance for decision support
- Built end-to-end **Python data pipelines** (ingest/clean/**feature engineering**); benchmarked **ARIMA**, **LSTM**, **TimeGAN** and classical ML to compare **predictive accuracy** and **robustness** on large, noisy datasets
- Delivered **reproducible experiments**, clear documentation, and **dashboards** so stakeholders could interpret results and make **data-driven decisions** on tight timelines

Software Engineer – NASA CubeSat Project

Jan 2023 – Sep 2023

Rhodes College

Memphis, TN

- Designed and implemented **ETL pipelines** for **50+** sensor streams; enforced **data-quality checks** and schema controls to support scalable analytics and downstream ML
- Optimized **PostgreSQL** queries over **10K+** telemetry records (**40%** runtime improvement) to accelerate complex analysis, monitoring, and **predictive modeling** for mission stakeholders
- Delivered **audit-ready datasets** and **visual reports/dashboards**; collaborated with **cross-functional** teams to meet **project timelines** and stakeholder deliverables

Teaching Assistant (Summers 2024, 2025)

Jul 2024 – Aug 2024 | Jun 2025 – Aug 2025

Johns Hopkins University

Baltimore, MD

- Taught 50+ students **Python** and **Java**; led modules on **algorithms** and **recursion**; authored hands-on **labs**, introduced **Git/GitHub** workflows, and mentored teams to deliver a playable **game** capstone.
- Ran **pre/post assessments** and targeted support, driving a **41.7%** average score increase; facilitated code reviews and debugging sessions to improve submission quality and on-time project completion.

PROJECTS

GenAI Risk & Compliance Summarizer | *Python, PostgreSQL, Hugging Face, Streamlit*

June 2025 – Present

- Built **ETL/data lake** ingestion for **50K+** **SEC filings**; designed schemas enabling **data mining** and **compliance-ready analysis** aligned to **project timelines**
- Applied **NLP** (Transformers) to extract risk factors and generate **stakeholder-ready summaries/visualizations**; validated outputs with **statistical checks** for quality
- Delivered an **interactive dashboard** for **predictive insights** and exploration of cybersecurity/compliance themes, supporting advisory-style decision making

NLP Text Insight Engine | *Python, Hugging Face, FastAPI, Next.js, Docker, Haystack*

Oct 2024 – Feb 2025

- Engineered **data pipelines** (GoEmotions, Sentiment140) for **Transformer** training with robust **preprocessing**, **tokenization**, and label validation to ensure **data quality**
- Deployed a **FastAPI** inference service and integrated web UI to analyze large text corpora for **sentiment**, **emotion**, and **intent** in real time
- Managed **project deliverables** through **cross-functional collaboration**; integrated outputs into **reports/dashboards** with **monitoring/logging** to maintain data quality and reliability

Issue Tracking System | *FastAPI, PostgreSQL, Docker, GitHub Actions, React*

Feb 2024 – Aug 2024

- Designed a **relational model** with **10+** normalized tables and **indexes** to strengthen **data integrity** and accelerate **analytics** queries
- Automated **CI/CD** with GitHub Actions to validate ORM/schema migrations and prevent regressions across **data engineering** workflows