

# OMAR R. MIAH

**Founder & Data Engineer | Python, PySpark, Databricks | DoD Enterprise Analytics + Production AI Systems**

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Data engineer, data scientist, and founder with six years building Python, PySpark/Spark, Databricks, Snowflake, and AWS workflows for major organizations across defense, financial services, entertainment, and education: DoD enterprise analytics, U.S. Air Force decision support, and production AI systems. Known for turning ambiguous mission and executive needs into reliable pipelines, trusted datasets, and products that ship.

## TECHNICAL SKILLS

**Core:** Python, SQL, PySpark, Spark/distributed processing, ETL/ELT, data modeling, batch pipelines, data quality

**AI / ML:** LLM & agentic pipelines, NLP, predictive modeling, recommendation systems, model evaluation, edge AI security

**Platforms:** Databricks, Snowflake, AWS (S3, Redshift, Athena, RDS/Postgres), MS SQL Server, Oracle, BigQuery, Airflow, Kafka

## EXPERIENCE

### CraftCode | Founder & CEO

Feb 2025 - Present • Washington, DC

- Architected Prism, Craftcode's flagship: a deep-tech, dual-use sovereign AI platform that unifies organizational context learning with edge security into a single pipeline: ingesting enterprise materials to compile domain-specific micro-agents for both human and AI workforce training, while leveraging those same micro-models as a hybrid edge privacy-enhancing technology (PET) layer that locally tokenizes IP, intercepts and masks prompts, and Socratically shards queries before routing them across offline and frontier LLMs.
- The training half, SkillSend, is live across academia and workforce development, with a newly secured university pilot: it generates complete courses with practice simulators and assessments from real source material and issues verifiable skill credentials. These real-world deployments set the human-first benchmark: successful training outcomes and verified skill for people before the same approach extends to AI agents.
- Sole engineer across the full stack: LLM/agentic pipelines, AWS serverless backend, GraphQL APIs, Postgres/pgvector retrieval, evaluation loops, and telemetry.

### Virtropy | Founder & Principal Consultant

Mar 2025 - Present • Washington, DC

- AI & data advisory for high-stakes clients (legal, humanitarian, and defense-adjacent); build production chatbots and agentic systems for regulated domains.
- Project OASIS: architected a fully offline, sovereign AI stack for medical, cyber, and emergency decision support in disconnected environments; submitted to the NATO DIANA Human Survivability challenge.

### Rhombus Power | Senior Data Scientist

Jul 2024 - Dec 2024 • Washington, DC

- Contributed to Guardian, Rhombus's flagship national-security AI platform, fusing multi-domain data into predictive intelligence for military and intelligence leadership.
- Fed analytics across an ~\$2B defense-budget portfolio, sharpening resourcing and readiness decisions for U.S. Air Force senior leadership and general officers.

### Booz Allen Hamilton | Senior Data Engineer, Advana

May 2023 - Jul 2024 • Arlington, VA

- Engineered advanced PySpark/Databricks pipelines on Advana, the DoD's flagship analytics platform, feeding decisions used by the Joint Chiefs of Staff.
- Powered a single source of truth spanning 400+ defense business systems for 20,000+ users; resolved pipeline failures across hundreds of thousands of rows and authored the stability roadmap. Earned Python Expert badge.

### AMC Networks | Data Engineer II

Jan 2022 - Jan 2023 • New York, NY

- Built the ML/AI data engineering behind the "For You" recommendation experience for millions of subscribers; delivered content analytics for major live events. Automated QA cut anomalies 30%.

**Earlier:** World Education Services, Data Engineer (2021-2022) • Dow Jones, Data Analyst Intern (2021) • Code Immersives, SQL & Python Instructor (2020-2021)

## EDUCATION

**Queens College, City University of New York (CUNY) | B.S. Computer Science**

May 2021