

WORK EXPERIENCE

Nuaav Software Engineer September 2025 – Present

Secure Semantic Data Mesh & Multi-Tenant Access Control

Dremio, OpenSearch, AWS RDS, Cognito, Lambda, API Gateway, Redis, Python

- Engineered semantic search over a Dremio data mesh (unsupported natively) using **OpenSearch** across **4+** data sources, custom-building a **Dremio MCP server** that fuses semantic + keyword search via **RRF ranking** over **100,000+** indexed documents.
- Designed a multi-tenant **access control system** (**AWS Aurora** catalog, **Cognito** SSO, **Lambda** authN/authZ at **API Gateway**) with a **Redis**-backed auth proxy for session/idle-timeout management.
- Shipped the system to production across **3 platforms**, securely serving **1,000+** customers with zero cross-tenant data incidents.

Agentic Workflow Automation Microsoft Agentic Framework, Azure ADLS, Fabric, PySpark, Cosmos DB, PowerBI

- Built an agentic AI system automating **Zendesk**-driven support workflows via polling ingestion, **FastAPI**-triggered actions, and **Cosmos DB** logging.
- Engineered **ADLS-to-ADLS** curation pipelines through **Microsoft Fabric** for **14 SAP** data tables (**4B+** historical rows, **150,000+** rows/day), implementing **Change Data Capture** for downstream consistency.
- Built a **3-dashboard PowerBI** report with optimized **DAX** measures on Cosmos DB log data, giving stakeholders visibility into ticket volumes and AI agent performance.

Provisioning Automation GuideCX, Python, FastAPI, Salesforce, Snowflake, AWS, PostgreSQL

- Architected event-driven pipelines using **GuideCX** webhooks, automating **200+** onboarding workflows and cutting provisioning time from **50+ hours** to under **10 minutes** per client.
- Built a proprietary **FastAPI** task engine for distributed execution across Salesforce and internal systems, with **PostgreSQL**-backed logging and retry mechanisms, cutting incident escalations by **40%**.

Customer Data Platform (CDP) Snowflake, dbt, Airbyte, PowerBI, AWS Bedrock (Claude)

- Built ingestion pipelines (**Airbyte**) integrating **4** systems – Zendesk, Jira, Gong, Salesforce – into **Snowflake** via **dbt** medallion ELT workflows.
- Developed an AI contract-parsing utility (**Bedrock/Claude**) to extract opt-ins and renewal terms, enabling automated gap analysis and cutting manual effort by **30+ hours/week**.

Nuaav Software Intern January 2025 – July 2025

- Built high-volume data mesh pipelines for federal healthcare datasets using **Dremio**, with **NLP**-driven insights visualized via **Highcharts** dashboards.
- Developed a scraping/ingestion pipeline with **Firecrawl** + **AWS Bedrock**, converting **10,000+** pages across **5+** sources into LLM-ready datasets.

RESEARCH

DSSI Lab, University of Pretoria Researcher Feb 2024 – Feb 2025

- Proposed a low-resource text augmentation framework for Bantu languages under **Prof. Vukosi Marivate**; built an attention-based architecture improving sentiment classification benchmarks by **3–4%** over baseline.

FindMate, VIT Chennai Researcher/Developer Nov 2023 – Dec 2025

- Built a hybrid recommendation system (**TF-IDF** + **BERT**) for profile matching, improving Silhouette Score by **12.7%** and reducing Davies-Bouldin Index/Intra-Cluster Distance by **6.8%/8.4%**.

SKILLS

Programming:	Python, SQL, Java
AI / ML:	LLMs, NLP, RAG, Semantic Search, Scikit-learn, Pandas, NumPy
AI Tools:	Cursor, Claude Code, Opencode
Data Engineering:	ETL/ELT, dbt, Airbyte, PySpark, Dremio, OpenSearch
Backend & APIs:	FastAPI, REST APIs, Microservices, System Design
Cloud & Security:	AWS (Aurora, Cognito, Lambda, API Gateway, Bedrock), Azure (ADLS, Fabric), IAM
Databases:	PostgreSQL, Snowflake, Cosmos DB, Redis

EDUCATION

Vellore Institute of Technology, Chennai Chennai, Tamil Nadu
B.Tech Computer Science and Engineering, Spec. AI/ML **CGPA: 8.87** September 2021 – May 2025