

THIMIRA BANDARA

DATA ENGINEER

CONTACT

+1 331-205-0269

bandarathimira@gmail.com

Aurora, IL

<https://www.linkedin.com/in/thimira-bandara/>

SKILLS

- Programming: Python, SQL, Node.js, .NET, FastAPI, Git, Linux
- Data Engineering: ETL Pipelines, Spark, Databricks, Airflow, PostgreSQL, NoSQL, Snowflake, Data Lakes
- Cloud & DevOps: Azure, AWS, Docker, Kubernetes, CI/CD
- Terraform

LANGUAGES

- English (Fluent)

REFERENCES

Daniel Scaramelli

City of Aurora, Lead Data Engineer

Email : scaramelliD@aurora.il.us

Vin Patel

Nirvana Labs, Lead Developer

Email : vin.patel95@gmail.com



PROFILE

Data Engineer with expertise in cloud-native pipelines, scalable ETL, and big data platforms (Spark, Databricks). Skilled in designing automated data workflows, migrating legacy systems to the cloud, and enabling real-time analytics at scale. Adept at partnering with cross-functional teams to deliver data solutions that reduce latency, increase reliability, and drive business insights.



WORK EXPERIENCE

City of Aurora - IT

FEB 2024 - PRESENT

Data engineer

- Designed and deployed end-to-end ETL pipelines (Python, Azure Data Factory) automating ingestion of 5M+ municipal records monthly, reducing manual reporting effort by 80%.
- Led migration of 10+ legacy departmental systems to the cloud, cutting query response times by 40% and enabling centralized data access for 300+ employees.
- Built RSA-encrypted linked services with subnet restrictions to securely ingest sensitive financial and PII data from Snowflake into a data lake.
- Partnered with city stakeholders and community leaders, translating technical workflows into actionable insights for policy and budget decisions.

Nirvana Labs

May 2022 - Dec 2023

Data engineer

- Developed a high-performance News API (Node.js, PostgreSQL) handling 10K+ financial articles daily, powering FinBERT-based sentiment modeling with real-time feeds.
- Created a KNN-based behavioral classification algorithm for blockchain wallets, improving fraud detection accuracy and investor segmentation.
- Automated model-ready sentiment pipelines (Python, Cron), reducing processing latency from 12 hours to 30 minutes.
- Collaborated with data scientists and product teams to refine schema requirements, optimizing NLP pipelines for dashboard and ML consumption.



EDUCATION

University of Illinois Urbana-Champaign

- M.S. in Computer Science — GPA: 3.9/4.0 (2022-2024)
- B.S. in Earth, Society, and Environmental Sustainability — GPA: 3.5/4.0 (2018-2022)



PROJECTS

Energy + Renewables Data Pipeline (2024)

- Built an end-to-end pipeline to analyze correlations between energy demand and renewable generation.
- Used REST APIs + Azure Data Factory for ETL, processed in Databricks, and visualized in Power BI, handling 500K+ records/day.

Facebook Marketplace Car Finder Bot (2024)

- Developed a Discord-integrated car search assistant using Selenium + Python.
- Ranked and returned top 10 vehicle listings in real-time, reducing manual search time by 90%.
- Implemented rate-limit bypass and uptime monitoring for continuous scraping across multiple regions.

Graduate Research Match Platform (2023)

- Designed a FastAPI + PostgreSQL web app matching students with research opportunities using advanced filtering and ranking logic.
- Aggregated data from university directories, publications, and ranking systems, enabling a searchable advisor network for undergraduates.



CERTIFICATIONS

CJIS Security & Privacy (Privileged Role) - FBI / City of Aurora (2024)

- Certified to access and manage systems governed by FBI CJIS Security Policy, with elevated privileges for handling criminal justice and sensitive law enforcement data.
- Completed background check and security training to maintain compliance with federal data privacy and cybersecurity standards.