

(513) 276-5130
Cincinnati, OH
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Yash Bheke

Data Scientist / Data Analyst

Portfolio: yash-bheke.app
github.com/yashbheke2000
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Data scientist and ML-focused graduate student with end-to-end experience building scalable data pipelines, accelerating model inference by 87%, and driving six-figure cost savings through production ML systems, A/B testing, and cloud-based analytics on Databricks, AWS, and MLOps stacks. Passionate about building production-ready solutions that drive measurable business impact.

TECHNICAL SKILLS

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

Data Science & Machine Learning: PyTorch, TensorFlow, Keras, scikit-learn, NLP, LLMs, RAG, A/B Testing

Cloud & Big Data: Databricks, PySpark, Snowflake, AWS (S3, RDS), BigQuery, Oracle, MySQL, PostgreSQL

Data Engineering: ETL (Batch & Real-Time), Feature Engineering, PCA, Operational Data Store, Data Warehousing

Visualization & Analysis: Tableau, Power BI, Looker, Excel, Zoho, Matplotlib, Seaborn

DevOps & Deployment: Docker, FastAPI, Flask, Git, GitHub, CI/CD

TECHNICAL EXPERIENCE

AI Intern

University of Cincinnati

Sept 2025 - Dec 2025

Cincinnati, Ohio

- Built a custom n8n-based RAG workflow that ingests MSIS program FAQs from Google Drive, chunks content, creates OpenAI embeddings stored in a Pinecone vector database; enabling faster semantic retrieval with dynamic retraining-free updates.
- Achieved 95% validation accuracy on a custom 30-intent classification model using a TensorFlow/Keras neural network.

Graduate Assistant (IS 8034: Big Data Integration)

University of Cincinnati

Sept 2025 - Dec 2025

Cincinnati, Ohio

- Optimized legacy data pipeline on Databricks, improving processing efficiency by 31% across 15 complex research workflows.
- Designed scalable data ingestion pipelines integrating AWS RDS/S3 with Unity Catalog for reproducible ML experiments.

Data Scientist

Accelya

Sept 2022 - Jul 2024

Mumbai, India

- Accelerated model inference time by 87% (from 15+ minutes to under 2 minutes) by enhancing the predictive analytics pipeline with PCA-based dimensionality reduction and XGBoost hyperparameter tuning which aided business analysts across 20+ clients.
- Saved \$200K+ annually in operational costs by developing and deploying ensemble classification models (Random Forest, Gradient Boosting) via FastAPI, achieving 81% accuracy in flight delay predictions for 12 global airlines with 1k+ daily inferences.
- Improved user engagement by 18% and reduced reporting errors by 16% by designing A/B testing frameworks that combined Bayesian inference and hypothesis testing; identified 9 statistically significant improvements in financial workflows and UI.
- Automated data pre-processing, eliminating 60+ hours of monthly manual effort by streamlining cleaning, validation, and EDA.

Airbnb Optimum Pricing Tool

Academic / Personal Project

Oct 2024 - Dec 2024

Cincinnati, Ohio

- Developed a regression model to predict Airbnb listing prices, improving metrics by 40% compared to baseline models.
- Performed data cleaning, pre-processing, and feature engineering (outlier removal, imputation, one-hot encoding), applied SHAP to identify key price drivers and deployed via Streamlit for hosts to tweak parameters and view optimum pricing.

EDUCATION

Master of Science in Information Systems, University of Cincinnati, Carl H. Lindner College of Business

Aug 2024 - Apr 2026

Relevant coursework: Gen AI, Statistical Computing, Data Mining for BI, Data Analysis, AI & Machine Learning, Data Visualization

Bachelor of Engineering in Electronics and Telecommunications, University of Mumbai

Aug 2018 - May 2022

ACTIVITIES

Student Ambassador, MSIS, University of Cincinnati

Sept 2025 – Dec 2025

Project Lead, Neo Initiative (Pro-bono Consulting), University of Cincinnati

Sept 2025 – Dec 2025

Technical Head, SIES Graduate School of Technology

May 2020 – Jan 2022

Flagship Events Organized: ByteCamp, Hackathons, Dev Summit, TEDxSIESGST

May 2020 – Jan 2022

CERTIFICATES

Python, Hackerrank ([LINK](#))

Advanced SQL, Hackerrank ([LINK](#))

Google Data Analytics, Google ([LINK](#))

Relational Database Design, Pluralsight ([LINK](#))