

Deepak Prabakaran

deepakprabakaran18@gmail.com ◦ 248-631-9532 ◦ linkedin.com/in/deepakprabakaran/ ◦ U.S. Citizen

PROFESSIONAL EXPERIENCE

Lennar

Dallas, Texas

Data Engineer I

April 2025 – Present

- Rebuilt end-to-end data orchestration pipeline using Apache Airflow, managing Bronze-Silver-Gold medallion architecture across AWS Glue, Lambda, S3, and Snowflake to streamline data transformation workflows.
- Designed dimensional and fact data models for Five Star Plan Report implementing a star rating algorithm to evaluate home construction quality and profitability across divisions nationwide.
- Architected automated Glue validation scripts for enterprise-wide ETL pipeline redesign projected to reduce AWS costs from \$1.5M to \$500K annually, ensuring data integrity across legacy and modernized infrastructures.
- Spearheaded refactoring initiative for Homesite Financials and Overhead Financial models, converting CTEs to macro calls and eliminating 38 downstream dependencies from snapshot/incremental logic, reducing overall execution time
- Engineered data ingestion pipelines using Qlik to migrate BuildPro and JDE source tables into Snowflake, enabling business intelligence teams to generate actionable insights from homebuilding operational data.
- Achieved 100% column match validation on JIRA tables against Power BI Connector through comprehensive sourcing analysis, enabling migration off legacy connector and reducing licensing costs.
- Implemented AWS infrastructure for pipeline monitoring and security using CloudWatch, Parameter Store, and Secrets Manager to maintain reliable, scalable data operations.

Rocket Companies

Detroit, Michigan

Applications Engineering Intern

May 2024 – August 2024

- Developed CircleCI and HAL deployment pipelines to deploy financial auditing cron-jobs through AWS Lambda.
- Amplified overall computing efficiency by 40% by optimizing package dependencies on auditing software via AWS.
- Architected an AI chatbot with micro service integration to allow users to retrieve sensitive company information.
- Redesigned S3 bucket architecture for financial data storage, implementing structured naming conventions and folder hierarchies to improve data discoverability and streamline audit workflows.
- Resolved commission discrepancies by troubleshooting data pipeline issues and executing SQL validation scripts.

Department of Electrical Engineering

Columbus, Ohio

Student Research Intern

August 2023 – December 2024

- Used React and AWS Cloud to develop a full stack mobile app to aid 5+ communities worldwide gain solar power.
 - Wrote software to transfer solar health via telemetry to end users and database using AWS Kinesis and Lambda.
 - Integrated comprehensive User Acceptance Testing against 30+ devices to pinpoint real-time performance issues.
-

PROJECT EXPERIENCE

Biometric Feedback System for Stress Reduction

December 2024

- Designed a negative feedback loop using a Raspberry Pi, heart rate sensor and a speaker to reduce individual stress.
- Applied MATLAB libraries to modulate pitch, volume, and tempo given user's Heart Rate and Heart Rate Variability.
- Collaborated with a team of students to extensively document processes and create a final Technical Design Report.

Multi-Container Management Tool with Docker Compose (Personal Project)

August 2024

- Created a web tool to manage customer data in a containerized environment for temporary and permanent storage.
- Engineered a multi-container application by integrating Flask web service, Redis Caching, and PostgreSQL database.
- Formulated data persistence and database initialization strategies using Docker Volumes and SQL scripts.

NBA Twitter/X Sentiment Analysis using Python (Personal Project)

June 2023

- Implemented a sentiment analysis software using Twitter/X's API to compute real-time scores of NBA players.
 - Developed the program using Natural Language Processing and the Machine Learning Model RoBERTa.
 - Added a User Interface to allow users to be able to input various NBA Players into the software and receive a score.
-

EDUCATION

The Ohio State University

Columbus, Ohio

Bachelor of Science in Computer Engineering

December 2024

QUALIFICATIONS & CERTIFICATIONS

- **Technologies:** AWS Services, Salesforce, QLIK, DBT, Snowflake, Palantir, GIT, CircleCI, Go Anywhere, Docker
- **Languages/Frameworks:** Python, Java, C, C++, JavaScript, SQL, PostgreSQL, Swift, Excel, HTML, CSS,
- **Certifications:** AWS Cloud Practitioner, DBT Fundamentals, DBT Advanced Materialization