NANDINI PATEL

Bloomington, IN | (870) 923-2213 | nantpate@iu.edu | linkedin.com/in/nandinipatel0204 | github.com/nandiniii2

Summary

Software engineer transitioning to data science with strong foundation in Python, SQL, and machine learning. Completed data analysis internship processing 500K+ records and developed multiple ML projects including predictive models and big data pipelines. Currently pursuing MS in Computer Science with focus on Applied Machine Learning and Cloud Computing.

Education

Indiana University, Bloomington, IN   **Aug 2024 - May 2026**
Master of Science, Computer Science (GPA: 3.78/4.00)
- **Coursework:** Applied Algorithms, Advanced Database Concepts, Engineering Cloud Computing, Applied Machine Learning, Software Engineering 1, Systems and Protocol Security and Information Assurance

L. J. Institute of Engineering and Technology (GTU), Ahmedabad, India   **Aug 2019 - Jun 2023**
Bachelor of Engineering, Computer Engineering (GPA: 9.37/10.00)
- **Coursework:** Analysis and Design of Algorithms, Data Structures, Database Management Systems, Web Programming, Machine Learning

Skills

- **Languages:** Python, SQL, R, JavaScript, Java, TypeScript, HTML, CSS, C#
- **Frameworks/Libraries:** TensorFlow, Keras, Angular, .NET, React, Node.js
- **Databases:** MySQL, PostgreSQL, MSSQL, Oracle
- **Tools & Platforms:** AWS (EC2, S3, QuickSight), Tableau, PySpark, Hadoop, Snowflake, GitHub
- **Other:** Agile/Scrum, ETL, Data Warehouse, Data Analysis, Database Management, Pandas, MATLAB, NumPy, Seaborn, Statistics, Machine Learning

Projects

F1 Finish Tier Predictor   **Jun 2025 - Aug 2025**
- Conducted exploratory analysis on Formula 1 race, lap-time, and pit-stop data to identify performance patterns.
- Engineered race features (lap-time stats, pit-stop durations, grid position, circuits) and trained predictive models (Random Forest, XGBoost) to forecast finishing positions, evaluated with Mean Absolute Error.
- Designed an interactive Streamlit app where users can input race parameters that maps predictions into finish tiers (Top 3, 4–10, 11+) and visualizes class probabilities for interpretability.

COVID-19 Healthcare Analytics Platform   **Aug 2024 - Dec 2024**
- Engineered distributed data pipeline using PySpark, Hadoop, and AWS (EC2, S3, QuickSight) to analyze 5M+ COVID-19 patient records.
- Optimized queries with partitioning, bucketing, and compression.
- Launched real-time AWS QuickSight dashboards for ICU occupancy, infection trends, and resource tracking.
- Designed predictive models and a scalable cloud architecture for healthcare resource management, planning and forecasting.

House Price Prediction Model   **May 2024 - Jun 2024**
- Crafted machine learning model from large datasets using linear regression and decision tree algorithms, achieving R^2 score of 0.82 on test data.
- Processed and cleaned datasets from 3+ real estate sources for accurate modeling.
- Created data visualizations with Python libraries (Matplotlib, Seaborn) for stakeholder presentation.

Work Experience

IBM SkillsBuild (CSRBOX Foundation) | *Data Analyst Intern*   **Feb 2023 - May 2023**
- Processed 500K+ records using SQL and Python, developing insights that increased reporting accuracy.
- Applied statistical modeling and regression to identify key user behavior patterns to guide 3 strategic decisions.
- Streamlined data cleaning processes, reducing dataset preparation time by 40%.

MyEdMaster LLC | *Software Developer Intern*   **Jun 2025 - Aug 2025**
- Configured dashboard and navigation system, making switching across 5 core modules smoother and the user experience more effortless.
- Implemented a secure login and profile system (React.js, Python, MySQL) with multi-device access.
- Created reusable frontend components and synced with backend APIs, speeding up development by 25% and keeping the codebase clean.
- Helped develop the search and chat features supporting 100+ daily user interactions between entrepreneurs and partners.

MobMaxime (Eventtan Pvt. Ltd.) | *Junior Web Developer*   **Dec 2023 - Jul 2024**
- Led development of 4 scalable web applications using ASP.NET and C#, focusing on performance optimization and system reliability.
- Collaborated with frontend, backend, and QA teams, deployed modular backend systems, and improved development productivity by 20%.
- Promoted to full-time role based on consistent performance across previous internship positions.

MobMaxime (Eventtan Pvt. Ltd.) | *Web Developer Intern*   **Feb 2023 - May 2023**
- Built adaptive web interfaces using ASP.NET and Angular with improved response times by 25%.
- Connected SQL backends with RESTful APIs, improving data fetch operations.
- Utilized Entity Framework for efficient SQL database management, improving database performance.

MobMaxime (Eventtan Pvt. Ltd.) | *Frontend Developer Intern*   **Apr 2022 - Jun 2022**
- Implemented responsive UIs in Angular with focus on mobile-first design and cross-browser compatibility.
- Engineered reusable Angular components and developed component library for consistent design patterns across 3 company projects.
- Optimized JavaScript and CSS performance, implementing lazy loading and code splitting techniques.