# ZEEL PATEL, MS

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## EDUCATION

**Master of Science in Software Engineering Systems** Expected May 2025
Northeastern University (Boston, MA)
Relevant Coursework: Program Structure and Algorithms, Object Oriented Design, Data Science, Database Management System

## TECHNICAL SKILLS

**Language**: Python, C#, SQL, Java, PHP, HTML5/CSS
**Databases**: MySQL, PostgreSQL, NoSQL, Oracle, MongoDB, RDS
**Machine Learning:** Regression, Classification, Clustering, PCA, Hypothesis Testing, Data Analysis, Decision Modelling
**Platform**: Git, Eclipse, Visual Studio, Jenkins, Jira, Linux, Docker, Amazon Web Services (EMR, EC2, Route53, Cloud Front)
**Frameworks:** Spark, Spring Boot, FAST API, Flask, React JS, Java Script, Django
**Expertise:** Machine Learning, Artificial Intelligence, Analytics, Team Collaboration, Networking, Debugging

## PROJECTS

**Python-TextToSQLGenerativeAI (Python, Gemini, NLP, Streamlit)** **Jan 2024 – May 2024**
- Developed an NLP pipeline utilizing Google's Gemini for semantic analysis, enabling the conversion of unstructured text into structured SQL commands.
- Engineered a user-friendly interface with Streamlit, enhancing user interaction and accessibility for the text-to-SQL model.
- Integrated advanced natural language processing techniques to accurately interpret and generate SQL queries from natural language inputs.
- Conducted rigorous A/B testing to optimize the performance and accuracy of the text-to-SQL conversion, resulting in a 15% improvement in conversion accuracy.

**ML-Real-estate Price Prediction (Python, Pandas, NumPy)** **Sep 2023 – Dec 2023**
- Executed comprehensive data visualization using Matplotlib and Seaborn, providing insightful analyses and visual representations of real estate data trends.
- Implemented feature engineering and scaling techniques, including Min-Max scaling and Standardization, to enhance machine learning model performance.
- Applied one-hot encoding for categorical variables and utilized K-fold cross-validation, achieving an impressive 82% accuracy rate in predictive modeling.
- Conducted extensive data cleaning and preprocessing, ensuring high-quality data for machine learning applications and predictive analysis.

**Power BI-Sales Insight Dashboard (Data Visualization, DAX, Power Query, SQL)** **Sep 2023 – Dec 2023**
- Designed a dynamic Sales Insight Dashboard in Power BI, integrating data from over five sales channels, delivering a comprehensive view of sales performance and trends.
- Developed interactive visualizations and drill-down capabilities in Power BI, increasing stakeholder engagement with sales data exploration by 20%.
- Automated data refresh and scheduling processes in Power BI using DAX and Power Query, reducing manual update efforts by 70% and ensuring daily data accuracy.
- Conducted advanced data analysis and mining to uncover critical sales insights, leveraging SQL and Power BI's analytical tools for strategic decision-making.

## EXPERIENCE

**Ordex Technology Solution Inc,** *(Java, Spring-Boot, Jira, SQL)* Feb 2023 – Jun 2023
*Software Developer Intern* Gujarat, IN
- Handled and resolved 10 client support ticket weekly using Jira platform, which significantly improved client satisfaction by 50%
- Assisted team of 4 member in designing CI/CD pipeline using Jenkins for automated build, test, and deployment.
- Analyzed and created documentation on new live project acquired by the company using debugging techniques and postman.
- Documented requirements and process to integrate third party API for an existing project reducing 30% workload.

**Softvan Pvt Ltd,** *(Python, Data Science, SQL)* Jun 2021 – Jun 2022
*Full Stack Developer Intern* Gujarat, IN
- Developed robust data-driven applications by analyzing and processing data using Python libraries such as Pandas and NumPy, enhancing data insights and decision-making processes.
- Conducted comprehensive data analysis and validation, achieving a 99.9% accuracy rate in identifying critical data issues, which led to a reduction of data inconsistencies by 50%.
- Designed and optimized relational databases, crafting efficient schemas and SQL queries, which streamlined data management and improved the performance of data-centric applications.

## OPEN-SOURCE EXPERIENCE

**Police Data Trust** Boston, MA
- Contribute to project using TypeScript, Python Flask, Docker, and PostgreSQL to facilitate search end point API.
- Develop unit tests for components and integration tests for seamless module interactions and automated 100% API testing.
- Collaborate with project manager to understand project problems and delivered end point within tight deadlines.