

Vishal Patil

Data Scientist

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EDUCATION

Master of Science in Data Science

Aug 2022 – Apr 2024, Dearborn, MI

University of Michigan, Dearborn

Relevant Coursework: Pattern Recognition and Neural Network, Artificial Intelligence, Database Systems, NLP, Deep Learning

Bachelor of Engineering in Computer Engineering

July 2016 - Apr 2020, Pune, India

Savitribai Phule Pune University

Relevant Coursework: Data Analytics, Artificial Intelligence and Robotics, Database Management Systems, Business Intelligence

EXPERIENCE

Full Stack AI Developer - PrismGen AI

Mar 2024 - Present, San Francisco

- Developed PrismGen AI, a comprehensive AI SaaS platform built using Next.js, integrating the GPT-4 Turbo model from the OpenAI API to power a wide range of AI-driven features, including Chatbot, Doctor GPT, Email GPT, Code Generation, Image Generation, and Chef GPT, each prompt-engineered to provide targeted answers to specific user queries.
- Planning to implement advanced features such as Chat with PDF and Image, which will allow users to upload PDF and image files and ask questions based on the content, utilizing embedding models and vector databases like Pinecone for efficient storage and retrieval of embeddings.
- Demonstrating strong expertise in AI integration, prompt engineering, and full-stack web development using cutting-edge technologies like Next.js, the OpenAI API, and vector databases to create a user-friendly, versatile, and scalable AI SaaS platform.

Data Science Intern | Market Analysis & BI Specialist – AINE AI

Mar 2022 - Apr 2022, Pune, India

- Spearheaded the development of an innovative Market Share Analysis Dashboard using Tableau and Power BI, driving data visualization and analytics enhancements that led to a 40% increase in market share insights.
- Orchestrated detailed sales performance analytics utilizing T-SQL in Azure Data Studio for Adventure Works Cycles, delivering actionable intelligence that fueled a 12% revenue increase and optimized business strategies.
- Compiled and presented comprehensive reports that distilled complex data into key insights, augmenting stakeholder understanding by 35% and informing critical business decisions.

Programmer Analyst – Cognizant Technology Solutions

Nov 2020 – April 2022, Pune, India

- Collaborated with a team to enhance the Notification Platform for a major US healthcare client, leveraging data-driven insights to improve platform stability by 15% and reduce connectivity errors by 30% through comprehensive testing using POSTMAN and SoapUI.
- Utilized Oracle SQL Server to optimize notification workflow accuracy by 25% and maintain a 98% system uptime, demonstrating strong skills in data management, analysis, and ensuring system reliability and performance.
- Developed and launched an innovative PUSH notification alert application, employing data analytics to drive design decisions, resulting in a 40% increase in user engagement metrics and showcasing the ability to leverage data insights to enhance user experience.

PROJECTS

Brain Tumor Segmentation using U-Net

- Developed a U-Net convolutional neural network to segment brain tumors from MRI scans, achieving a mean F1 score of 0.72958 across 612 test images.
- Compiled and analyzed performance metrics post-model evaluation, resulting in detailed statistical insights including mean Jaccard index (0.64265) and precision (0.77568).
- Revamped model evaluation processes by integrating interactive visualizations of training/validation losses and dice coefficients into the Jupyter Notebook workflow, leading to a 15% increase in model performance and accuracy metrics.
- Engineered a high-performance TensorFlow dataset pipeline, optimizing image preprocessing and model training; validated results to ensure accuracy and efficiency, leading to a 40% improvement in model performance metrics.

Retail Data-Driven Product Recommendation Engine

- Designed a cutting-edge content-based recommendation system using Python, TensorFlow, and Keras; achieved an outstanding 98.34% accuracy in product recommendations, surpassing industry benchmarks and enhancing customer experience.
- Addressed and corrected unseen labels in the dataset, boosting the model's robustness and reliability by 27% during evaluations.
- Deployed the model into a Flask-based web application, creating an intuitive UI that improved the e-commerce user experience by facilitating more effective product selection and recommendations.

Netflix Content Analytics Dashboard using Tableau

- Produced a Tableau dashboard to dissect and display Netflix's content distribution, unlocking insights for global strategic initiatives and synthesizing viewer ratings data to orchestrate a content diversification plan that maximizes audience engagement.
- Assessed and decoded 10 years of temporal content data, uncovering growth patterns and insights that informed strategic content acquisition tactics, potentially increasing monthly active users by 45% and boosting revenue by 20%.
- Distilled top genre performance metrics, steering data-driven recommendations for content development investments to enhance viewer engagement and investment returns.

SKILLS

Programming Languages: Python, R, SQL

Tools: Tableau, Power BI, R-Studio, Azure Data Studio, Excel, Git, JIRA

Machine Learning Libraries: TensorFlow, Keras, Scikit-learn, Pandas, NumPy, Matplotlib

CERTIFICATIONS

- Python for Everybody Specialization (5-Course specialization) – Coursera
- Complete Machine Learning and Data Science Bootcamp 2021 – Udemy
- Data Reporting and Analysis with T-SQL - AINE AI