# Sai Pranav Krovvidi

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#### **EDUCATION**

## Northeastern University

Boston, MA

Master of Science in Data Analytics Engineering – GPA – 4.0

December 2026

**Relevant Coursework**: Foundations in Data Analytics, Data Management for Analytics, Data Mining in Engineering, Storytelling with Data

## VIT Bhopal University

Bhopal, India

Bachelor of Technology in Computer Science Engineering- CGPA- 3.55

May 2024

**Relevant Coursework**: Data Structures Algorithms, DBMS, Applied Linear Algebra, Calculus & Laplace Transforms, Probability, Statistics and Reliability

# **SKILLS**

Languages: Python, SQL, NoSQL

Tools: MS Excel, PowerBI, MongoDB, Streamlit, Docker, Git

**Areas of Expertise:** Data Analysis, Machine Learning, Predictive Modeling, Clustering **Frameworks:** Scikit-Learn, PyTorch, Pandas, NumPy, Seaborn, Matplotlib, XGBoost

#### **WORK EXPERIENCE**

**Tally Solutions** 

Remote, India

Software Development Engineer • Intern

June - July 2023

- Designed and built a custom software using MongoDB, NoSQL, and HTML for the Project Management Office (PMO) that improved project and resource allocation, increasing efficiency by 40%
- Developed a proprietary data visualization pipeline which illustrated the allocation of resources to a project, along with an overview of available resources that can be allocated to other ongoing projects within the company

#### **PROJECTS**

## **Nifty ETF Forecasting Dashboard**

February 2025

- Developed a full-stack financial dashboard using Streamlit to visualize stock market trends and volatility forecasts.
- Implemented Prophet-based time series modeling, achieving a 15% reduction in volatility prediction error (MAE: 1.13).
- Designed interactive visualizations for Bollinger Bands, MACD, RSI, and moving averages to analyze market patterns.
- Integrated automated ETL pipelines for real-time data processing from Yahoo Finance API, applying feature engineering techniques such as moving averages, returns, and volatility indices.

# **ER Pulse: Real-Time Emergency Care Insights**

January 2025

- Designed an interactive Streamlit-based dashboard to optimize hospital resource allocation and patient flow using the MIMIC-III clinical dataset.
- Built predictive models to estimate emergency department (ED) wait times, reducing manual resource planning efforts by 30% and improving response times for critical patients.
- Created visual analytics for hourly admissions, department utilization, and transfer patterns, enabling data-driven decision-making for hospital management teams.
- Streamlined deployment with Docker, ensuring consistent performance across environments and enabling real-time analytics updates.

#### **Instrument Sales Optimization**

September - December 2024

- Developed a centralized database for musical instrument retailers using SQL and NoSQL, optimizing inventory and sales processes by 30%. Implemented Python visualizations to analyze trends, such as top-selling products and popular brands
- Delivered actionable insights, increasing operational efficiency and customer satisfaction, and recommended strategies for stock optimization and supplier reliability

#### **VOLUNTEERING AND EXTRACURRICULARS**

# VIT Bhopal University Music Club

- Technical Team Member in 4 Chords, a music event conducted by the music club which included battle of bands and solo and duet competition

  May 2023
- Part of the Technical Team for an inter-college music event in the VIT Bhopal Annual College Fest Advitiya. Helped manage the stage and crowd while handling the technical aspects of the sound related setup as well with a footfall of 10k+

  May 2022