AMIT PRAJAPATI

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EDUCATION

Master of Data Science, Worcester Polytechnic Institute, GPA 4.00/4.00 **Aug 2023-Aug 2025**
Related Courses: Big Data Management, Statistics for Data Science, Introduction to Algorithm: Design and Analysis, Directed Research

Bachelor of Technology in Data Science, NMIMS, Mumbai, India, GPA 3.54/4.00 **Jun 2019-Jul 2023**
Related Courses: Data Structure & Algorithm, DBMS, Business Visualization, Statistical method-I and II, Artificial intelligence, Machine Learning, Computer Vision, Deep Learning, NLP, Cloud Computing

TECHNICAL SKILLS

Machine Learning: Keras, TensorFlow, PyTorch, OpenCV, PIL, Scikit-learn, Matplotlib, Seaborn, Flask, NLTK, Pandas
Programming languages: Python, MATLAB, R, HTML, CSS, C, Java, MySQL, MongoDB
Software: AutoCAD, Tableau, Excel, AZURE, PowerBI

PROFESSIONAL EXPERIENCE

Junior AI Consultant - Offshore Construction Associates, Boston, USA **May 2022 – Present**
- Leveraged advanced web scraping techniques using **Selenium** to automate the extraction of relevant data from multiple web sources. Integrated various **APIs** to further streamline the data collection process, reducing manual effort by approximately 70%
- Developed and maintained dynamic and interactive dashboards using **Power BI**. This enhanced the effectiveness of project management and strategic planning, leading to improved project outcomes and client satisfaction
- Contributed to the integration of **AI** and **BI** processes within the offshore wind industry, delivering high-quality services and optimizing project workflows through innovative solutions

Data Analyst - Munich RE, Mumbai, India **Dec 2022 –May 2023**
- Leveraged PySpark and Azure Data Lake to access, manipulate, and store data effectively for fraud detection analysis, managing a dataset of over 30 million records. Additionally, visualized the fraud network using graph plotting techniques to expose connections
- Integrated association rules like **Apriori** and **FP-Growth** to identify suspicious behavior and collusion, streamlining fraud investigations
- Played a pivotal role in elevating fraud detection accuracy by **30%** through the strategic application of association rules

Quant Intern - Fidelis Macro Global Fund, Ebene, Republic of Mauritius **May 2022 –Sep 2022**
- Employed the Zerodha **API** for data access, stored in a particular format for easy usage and testing, to develop and rigorously test multiple NSE Option Trading strategies, ensuring their robustness for live market conditions.
- Applied technical indicators such as VWAP, RSI, MA, and MACD to trigger the code for taking positions in the live market and exiting
- Monitored and analyzed **financial indicators**, optimizing return on investment and risk management strategies to enhance profitability while mitigating the risk of hitting the stop loss, resulting in a remarkable **50%** increase in **ROI**

Data Science Intern – Let the Data Confess, India **Jan 2022 –Feb 2022**
- Directed the development of a comprehensive loan approval workflow based on credit history analysis, utilizing **Python** for data gathering, cleaning, and processing, increasing loan approval process effectiveness by **70%**
- Applied diverse **Machine Learning** techniques for feature engineering, including **VIF** and **RFE**, and conducted classification modeling with **90%** accuracy. Implemented the solution on the cloud using **Streamlit** and **GitHub** for seamless accessibility and collaboration
- Utilized the project as a training course on constructing comprehensive classification pipelines, catering to students eager to delve into the field of Data Science and expand their knowledge

ACADEMIC PROJECTS

Path Finding Car **Oct 2022 – Nov 2022**
- Trained a self-driving car using the **genetic algorithm** Neuroevolution of Augmented Topologies (**NEAT**), ensuring obstacle-free navigation with the help of Python, **Deep Learning**, and **Pygame** for visualization of the progress of the car
- Crafted a model ensuring the car avoids collisions with walls (utilizing 3 antennas) while navigating the track. Implemented a **mutation** strategy to optimize car performance, saving the furthest-travelled car's weight for further train the next generation car
- Designed an intuitive and interactive user interface using Pygame, enabling **real-time** visualization and demonstration of the self-driving car's navigation progress on the track. This interface offers immediate feedback on the car's movements and interactions

Real Time Mudra Classifier **Aug 2022 – Sep 2022**
- Created a reliable classifier for a real issue by capturing and **augmenting** 50k images, crucial due to unreliable online data. This step was essential due to the inconsistent availability of online data
- Performed thorough **data cleaning** and organization, used techniques like **PCA** and **LDA** to reduce dataset dimensions up to 20%. This lowered the computational requirements which eventually lead to faster processing and modelling of the data
- Achieved an impressive 94% accuracy by optimizing **deep learning** models like **ANN**, **CNN** and utilizing **transfer-learning** techniques with **VGG16**. Additionally, engineered and launched a real-time user interface to facilitate practical application

LEADERSHIP AND ENVOLVEMENT

- Served as the Head of Off-Campus Event Organizer within the Graduate Student Government committee at WPI, orchestrating numerous events encompassing student gatherings and outdoor activities to foster community engagement and camaraderie
- Acted as the Subhead of ISA (International Society of Automation) from 2019 to 2021, spearheading various events such as quizzes, mock legislatures, and competitions like IAG-2022, aimed at promoting knowledge sharing and professional development within the organization.