Viraj Patel

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EDUCATION

Syracuse University   Expected May 2025
Master of Science in Computer Science   GPA - 3.96/4
Relevant Coursework - Intro to Data Science, Natural Language Processing, Social Media Data Mining

Nirma University   Jul 2019 - Jun 2023
Bachelor of Technology in Computer Science   GPA - 3.70/4
Relevant Coursework - Artificial Intelligence, Deep Learning, Machine Learning, Probability and Statistics

SKILLS

Concepts & Algorithm: Machine Learning, Database Management, Data Analysis, GenAI, Statistical Analysis, ETL
Predictive Modeling, Time-Series Forecasting, Decision Trees, Random Forest, XGBoost, A/B Testing, MLOps
Languages : C, C++, Python, Java, JavaScript, SQL, NoSQL, React, PHP
Tools : MongoDB, PowerBI, Git, MySQL, Hadoop, PostgreSQL, PyTorch, Tensorflow, Docker, Numpy, Tableau
Frameworks : Django, JSON, Rest API, PyTorch,, Tensorflow, Flask, Keras, Scikit-learn, Kubernete
Big Data & Cloud: PySpark, Hadoop, AWS (EC2, S3, Redshift, Lambda)
Research : Explainable Artificial Intelligence(AI) for Industry 5.0: Vision, Architecture, and Potential Directions

EXPERIENCE

Data Analyst/Engineer   Nov 2024 - Present
iConsult Collaborative   Syracuse, NY

- Achieved a 30% reduction in **data processing** times as assessed by workflow efficiency and data throughput, by preprocessing, cleaning, and optimizing extensive traffic data using **Pyspark** .
- Developed interactive **Power BI** dashboards as measured by insights and trend identification, by analyzing 500k+ traffic records using **statistical modeling** and **time-series forecasting (ARIMA, Prophet)**.

Teaching Assistant   Jul 2024 - Present
EECS, Syracuse University   Syracuse, NY

- Designed **30+ problem sets** in collaboration with the professor, enabling students to practice and receive feedback via **Git**, **Excel** tracking for learning outcomes and skill acquisition.
- Led 15+ weekly tutorial to strengthen students' **data structures**, **problem-solving**, **algorithmic** skills through exercises.
- Streamlined the evaluation for assignments and exams by applying **Agile methodologies**, ensuring efficiency and consistency.

Software Development Intern   Jan 2023 - Jul 2023
Oracle   Hyderabad, India

- Accomplished prioritization of 100+ **Confluence** pages and key **Jira** tickets as shown by views, usage metrics, and weekly resolution time, by analyzing page importance and ticket criticality to optimize resource allocation.
- Built an automated Excel reporting system, **boosting analysis speed by 20%** and enhancing efficiency across 50+ projects.
- Reducing the manual workload by **80%** led to significant time savings, increased team productivity, and fewer operational errors by streamlining testing for plug-ins and macros across 50+ software projects using **Python**, **REST APIs**, and **JSON** scripts.

Research Assistant   Jan 2022 - Dec 2022
Nirma University   Ahmedabad, India

- Developed an Eye Gaze Estimation model using **Python, TensorFlow**, and **Keras**, achieving 88% precision in predicting X-Y screen coordinates by implementing deep learning techniques **(CNNs, GANs)**.
- Optimized eye-tracking performance and **minimized angular error to 3 degrees**, by fine-tuning the best model for training.

PROJECTS

Finbot | *Python, Django, NLP, Data Analysis, Recommendation System, LSTM, ETL, Docker*   Jul 2024 - Sep 2024
- Engineered an **AI-powered financial assistant** that tracks stocks and mutual funds, enhancing processing speed by 40% by automating data ingestion for 50+ sources with **Dockerized ETL workflows NLP analytics**.
- Trained an **LSTM-based model** on over 100k+ transaction records, enhancing **financial forecasting** accuracy by 15%.

Detect Farm Intrusion Using Thermal Images | *Python, Data Mining, Data Analysis*   May 2021 - Dec 2021
- Engineered a YOLOv4-based intrusion detection model, **achieving 78% accuracy** in identifying **nocturnal farm threats**.
- **Preprocessed 7,000+ infrared images**, applying **data augmentation & feature extraction** for enhanced model robustness.