## JASH NIMESH DHARIA JALIWALA

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#### **EDUCATION**

Master of Science in Applied Data Science, Syracuse University, Syracuse, NY

August 2023 – May 2025

Leadership: Teaching Assistant for Machine Learning for 120 students

Modules: Applied Machine Learning, Big Data Analytics, Financial Analysis, Data Warehouse, Database Management

Bachelor of Engineering in Computer Engineering, University of Mumbai, Mumbai, India

August 2019 – May 2023

## **TECHNICAL SKILLS**

Programming Languages: SQL (Advanced), Python, R, Java, Stata, SAS, C, C++, HTML, CSS, JavaScript

Database: MS SQL Server, Big Query, Snowflake, PostgreSQL, Oracle Database, MongoDB

Libraries: TensorFlow, PyTorch, AutoML, AutoTS, Keras, Pandas, NumPy, Matplotlib, Plotly, NLTK, scikit-learn, PySpark

Statistics: Probability, Statistical inference (Hypothesis testing, P-Values, Confidence Intervals), Regression, ANOVA

Tools: GCP, AWS, R Studio, Alteryx, Docker, Figma, Git, Tableau, Power BI, MS Excel, Trello, Twilio, dbt, Lucid, MS Access

Frameworks: Django, Flask, Node.js, Laravel, Angular, Vue.js, Next.js, .NET

#### **EXPERIENCE**

Graduate Data Scientist, Upstate Medical University, Syracuse

August 2024 – December 2024

- Developed 3 dashboards with SQL and Tableau to visualize key metrics, supporting insights on cash flow and patient trends
- Analyzed patient no-show rates with ETS, achieving 90% accuracy, helping enhance public clinic scheduling and decision-making
- Leveraged PageRank algorithm on clinical and operational data to rank 5 clinics by no-show rates, patient volume, and revenue, optimizing clinic performance and reducing inefficiencies across 21 healthcare personnel
- Harnessed project management tools, enhancing collaboration with associate directors and improving project outcomes by 20%

## Bioinformatics Data Scientist, Syracuse University, Syracuse

August 2024 – December 2024

- Implemented LSTM on 50 molecular datasets, reaching 85% accuracy in aggregation prediction, optimizing medical drug delivery
- Engineered SVM to predict whether a molecule will cluster, achieving 90% accuracy, enabling targeted selection for further study
- Applied Plotly to visualize clustering, revealing that molecular interactions depend on residue position over 200 nanoseconds
- Employed PyMol and VMD to visualize and analyze data from MD runs, improving understanding of dynamics

# Artificial Intelligence Research Team Lead, NEXIS Student Technology Lab, Syracuse

February 2024 – December 2024

- Led 3 teams to process 50,000 election tweets adopting BERT transformers achieving 91% accuracy, revealing voter sentiment
- Forecasted COVID-19 cases with 93% accuracy using Polynomial Regression, enabling health officials to anticipate outbreaks
- Furnished **data cleaning**, feature selection, **data visualizations**, and Gradient Boosting to predict startup acquisition likelihood for 923 companies, achieving an F1 score of 0.987, enabling insights into the key factors for startup investment
- Streamlined deployment workflows using Git for a CI/CD pipeline, resulting in a reduction in errors by 15%

#### Graduate Data Science Intern, J. Galt Finance Suite, Indianapolis

May 2024 – August 2024

- Incorporated an Auto dialer through Node.js and a REST API connection with Twilio, applying XGBoost for **statistical modeling** of call audio and duration estimation, increasing sales conversion rates by 15%
- Formulated an ETL pipeline with **Python** to enrich Zoho CRM records in **Big Query** leveraging data from Octoparse, adding 10000 data points, and upgrading **data quality** by 25%
- Directed risk management by forecasting 3-month sales trends using ARIMA, enabling mitigation strategies to reduce revenue loss
- Automated lead generation using the RAG technique, Botpress, and Google Cloud Function boosting customer outreach by 20%

#### **PROJECTS**

#### **Counteracting Misinformation by Gen-AI using Neural Networks**

January 2024 - May 2024

- Executed OpenCV for face detection and preprocessing methods like center cropping, resizing, and normalization on 10000 real and 6900 fake images, improving model accuracy by 10%
- Built a CNN with Alex Net, achieving 84.6% accuracy, and deployed via Flask and Vercel for real-time content moderation

## **Anomaly Detection Using Autoencoders**

August 2022 - May 2023

- Defined LSTM Autoencoders with PyTorch to detect ECG anomalies, achieving 98% accuracy on the ECG5000 dataset
- Deployed a Flask-based web interface for ECG data input and anomaly visualization, improving healthcare usability