

## PROFESSIONAL EXPERIENCE (2020-Present)

**Data Scientist**  
FireHose (Remote, New Jersey, United States)

- Orchestrated a cutting-edge project named “Multi-Agent Conversational AI Implementation” using AutoGen to create a conversational AI framework that allows for the collaborative execution of tasks through automated group chats. This involved integrating conversational agents with advanced AI models (GPT-4) to facilitate real-time problem-solving and task management. My role included coding in Python, integrating various AI APIs, and setting up a dynamic environment for both tool-based and human agent interaction, showcasing my ability to leverage AI for innovative solutions and streamline complex workflows.
- Skills applied: Python, AI/ML Integration (GPT-4), API Utilization, Collaborative Software Development.

**Software Engineering Intern**  
New Jersey Institute of Technology - Dept of Web System Design (Newark, New Jersey, United States)

- Led the development of a comprehensive food store website, from market analysis to deployment, showcasing a blend of analytical and technical skills.
- Skills applied: Figma, NextJS, Automated Testing (Playwright), GDPR compliance, Google Analytics, Mailchimp, GitHub. [View Project](#)

**Data Analyst - Sustainability Research Assistant**  
New Jersey Institute of Technology- Dept of Sustainability (Newark, New Jersey, United States)

- Conducted data analysis and visualization to identify sustainability and educational gaps, influencing strategic decisions.
- Skills applied: Pandas, Numpy, Power BI. [View Report](#)

**Data Analyst**  
IndiaDotCom Pvt Ltd (Noida, Uttar Pradesh, India)

- Developed an image-based search engine by training Resnet-50 on the company’s dataset and deploying it via a Flask REST API, enabling users to search products using images.
- Skills applied: Flask, REST, Resnet, transfer learning, KNN, Unsupervised Learning [View Project](#)
- Created an "Abstractive Text Summarizer" using 'Bidirectional and Auto-Regressive Transformers', which was later deployed for news article summarization saving 30% of staff's time on manually summarizing the text.
- Skills applied: Flask, Resnet-50, Transformer models from Hugging Face. [View Project](#)

**Machine Learning Engineer**  
International Institute of Information and Technology (Banglore, India)

- Performed “Telecom Churn Prediction” using Advanced Machine Learning.
- Predicted customer churn, optimizing a telecom's customer retention strategy.
- Skills applied: Numpy, Pandas, Matplotlib, Seaborn, Sklearn, SMOTE, RandomForestClassifier, PCA. [View Project](#)

- Automated “Credit Card Fraud Detection” process by performing Advanced Classification Techniques
- Engineered a model to detect credit card fraudulent transactions as it occurs, enhancing financial security.
- Skills applied: XGBoost, RandomForest, Gradient Boosting, SMOTE.. [View Project](#)

**Data Science Contractor**  
Valsad City Police – Department of Local Crime Branch (Gujarat, India)

- Leveraged Data Analytics to analyze cyber crime rates, aiming to identify crime distribution by city and explore root causes.
- Conducted thorough data analysis using Python and SQL, focusing on data cleaning and processing due to the data's extremely raw nature. Educated department officers on proper data handling and storage practices. Led the NETRAM organization in Valsad for project execution.
- Delivered a comprehensive report identifying zones vulnerable to specific crimes and tracing the out-state origins of these crimes, enabling efficient police force deployment and identification of high-risk stores and locations.
- Skills applied: Data Analysis, Python, SQL, Data Cleaning, Process Improvement, Educational Leadership, Strategic Planning, and Reporting.

## EDUCATION

- MS in Data Science (3.83/4.0), New Jersey Institute of Technology (2024)**  
**Relevant Coursework**: Applied Statistics, Probability, Inferential Statistics, Hypothesis Testing, A/B testing, ANNOVA, Big Data Analytics, Spark, Scala, Open CV, Semantic Search, Linear Regression, Ridge Regression, Lasso Regression, Reinforcement Learning, Regularization, Logistic Regression, Decision Tree, Boosting, Random Forest, Time Series Analysis, Principle Component Analysis, Clustering, Artificial Neural Network, Convolution Neural Network, Recurrent Neural Network, Natural Language Processing, Named Entity Recognition, Database Management System Design, SQL, Star Schema, Data Modelling, ETL, Web System Development, Agile, Cloud Computing, AWS, Data Analytics with R.
- BS in Data Science (3.4/4.0), International Institute of Information and Technology Banglore (2020)**

## CORE SKILLS & TOOLS

- Frameworks** React, NextJS, NodeJS, Flask, Pandas, Numpy, Elastic Search, Autogen, Matplotlib, Seaborn, Tensorflow, Pytorch, Keras, Scikit-Learn, Statsmodel, OpenCV, Beautiful Soup
- Programming Languages** Python, SQL, JavaScript, HTML, CSS

- **Clouds** AWS
- **Analytical Tools** Tableau, Power BI, R, Excel
- **ML/DL Algorithms** Linear Regression, Logistic Regression, Decision Tree, Random Forest, KNN, Gradient Boosting, XG Boosting, Principle Component Analysis, Clustering, Convolution Neural Network, Recurrent Neural Network, Artificial Neural Network
- **Developer Tools** VS Code, Jupyter Notebook, Command Line, Git, Github, Vercel, Playwright, Poetry, Docker.