

Creative Data Scientist holding a Master of Science in Data Science and having 6+ years of full-time work experience in delivering business problems by reducing manual efforts by automating workloads. Expert in articulating and translating business questions to both technical and non-technical audiences. Strong experience in machine learning, deep learning, and various tools and technologies such as Big Data, R, Python, SQL, Tableau, Power BI, PySpark, and NLP, including leveraging data to articulate the commercial value of data and analytics to senior stakeholders/clients through data visualization and storytelling.

### SELECTED CAREER HIGHLIGHTS

- Implemented filtering and search capabilities using Oculus - Meta Quest Pro and developed analytical tools for crime data analysis using HoloLens 2 and Unity 3D as a Graduate Research Assistant at the University of North Texas.
- Achieved a 30% reduction in software bugs and a 65% decrease in manual time, resulting in improved project efficiency. Optimized data storage capabilities by integrating AWS (S3), MySQL (Athena), and MongoDB (DynamoDB) as a Software Engineer at Brandmusle India PVT LTD.
- Successfully completed the Advanced Tracking System with Intelligent Resume Embeddings project, achieving over 75% accuracy in detecting and classifying resume similarity using hugging face models.
- Developed machine learning models and utilized Python libraries such as NumPy, Pandas, sci-kit-learn, and Tableau in the Data Science Capstone Healthcare project.
- Achieved 95% accuracy in predicting diabetes, resulting in a reduction in misdiagnoses and more targeted treatment plans. Served as the Vice President of the Data Science Organization at the University of North Texas, organizing events, and conducting Kaggle competitions, and seminars from industry experts, resulting in a 98% success rate and increased attendance.
- Presented posters on projects related to advanced tracking systems and data analysis and visualization of crime data.

### PROFESSIONAL EXPERIENCE

#### Graduate Research Assistant

5/2023 - 11/2023

University of North Texas – College of Information

Texas

- Implemented filtering and search capabilities to allow users to focus on specific crime types, time periods, or geographical regions using **Oculus – Meta Quest Pro**
- Developed analytical tools to generate statistical insights and identify patterns in crime data, empowering users with actionable information for **Hololens 2** using **Unity 3D**
- Applied Geo-Coding and Reverse Geo-encoding to enhance the User Experience for viewing the crime spot based on latitude and longitude.

#### Summer AI/CS Research Program

5/2023 - 11/2023

University of North Texas – Computer Science

Texas

- Demonstrated mastery of **Machine Learning, Deep Learning** by mentoring more than 600 students during their capstone projects, and facilitated innovative lesson plans for 3 **Data science** courses, resulting in an average satisfaction rating of 4.8/5 over 4 semesters.
- Developed and executed **Data Visualization** strategies utilizing **Tableau** and **PowerBI** to present research findings on optimizing **AI** indulged chess using the alpha-beta method in quiescence search, resulting in a 50% increase in understanding by stakeholders.
- Fabricated fine-tuned **LLMs** on research involved comparing traditional algorithms such as TF-IDF to advanced **NLP** techniques like BERT, and GPT to detect and mitigate bias, resulting in a 30% improvement in accuracy leading to more accurate detection of bias.

#### Software Engineer

12/2020 - 11/2023

Vertex Computer Systems

India

- Orchestrated automated Jobs initiatives by utilizing **JAMS** for **FTP** transfers and **SQL Agent** Jobs that resulted in a 30% reduction in software bugs which accelerated **agile** software development cycles.
- Revamped 500+ manual jobs using **Python** and **PowerShell** frameworks by leveraging the use of the **JAMS** tool resulting in a 65% decrease in manual time and a 75% reduction in human error in the successful launch of the intelligent Automation system.
- Collaborated effectively with cross-functional teams, including product development and quality assurance, and implemented **Vendor Integrations** for streamlined production assistance which resulted in a 50% increase in overall project efficiency.
- Reduced the **run/ threads** created for each job from 1000+ to less than 100 counts.

#### Software Engineer 2

9/2017 - 11/2020

Brandmusle India PVT LTD

India

- Optimized data storage capabilities by integrating **AWS** (S3) with a **MySQL** (Athena) database and **MongoDB** (DynamoDB) for metadata, resulting in an improved user experience and system performance by reducing 20% data storage costs.
- Rapidly improved the performance of the Checkout flow from 8000ms to 2000ms for a larger number of orders and integration feasibility into existing systems using **Web API**, **Angular**, **MySQL** (Athena), **MongoDB** (Dynamo DB), **JAMS**, **Camunda**, **File Zilla**, **Azure Blob storage**, **Umbraco** and **Kibana** tools and technologies
- Supervised the Support team for various enhancements and bugs and made recommendations to improve order issues by 90%.
- Increased productivity by 200%, surpassing the initially quoted project timeline of 12 months due to successful leadership and **agile** methodology adoption.

## PROJECT EXPERIENCE

### **Advanced Tracking System with Intelligent Resume Embeddings**

- Streamlined hugging face models to detect and classify similarity for resumes using embeddings with over 75% accuracy on a dataset of combinations of resumes and job descriptions.
- Conducted extensive research on deep learning techniques and **statistical models** to optimize the accuracy and efficiency of the resume and job description data, resulting in improved accuracy by 20% compared to previous models.

### **Data Science Capstone Healthcare**

- Used Python libraries such as NumPy, Pandas, sci-kit-learn, seaborn, matplotlib, Logistic Regression, ROC Curve, Decision Tree Classifier, Random Forest, Support Vector Classifier, and K-NN to predict if the patients in the dataset have diabetes or not with an accuracy of 95%.
- Created innovative dashboards, and stories to give insights for the patient's data using Tableau, developed machine models with the perfect fit to predict diabetes, resulting in a 40% reduction in misdiagnoses and more targeted treatment plans.

### **Mercedes Benz Greener Manufacturing**

- Using the provided dataset, developed a reliable machine-learning model that forecasts the testing car's time after manufacturing, by submitting the results over Kaggle received a score of 0.1369, this was implemented using Python libraries such as **NumPy, Pandas, sci-kit-learn, seaborn, and XG Boost** to predict the time it takes to pass testing.
- Discovered key markers associated with car manufacturing by conducting statistical analyses.

## COMPETITIONS EXPERIENCE

### **Prediction Competition – Bike Sharing Demand**

10/2022

– 11/2022

Kaggle - University of North Texas

Texas

- I have always been passionate about ML Models and entered this competition to have a professional critique of my work. I was able to improve my Modelling skills and learned more about the use of techniques that improve accuracy. I placed third out of 27 teams by a score of 48.41668.

### **Regression Competition – Data Rush: UNT's Ultimate Regression Challenge**

02/2023 –

03/2022

Kaggle - University of North Texas

Texas

- In this competition, we are using Machine learning models to Predict the body fat percentage using regression techniques. Predicting body fat percentage can be an important part of a person's health profile, as it is linked to various health risks such as heart disease, diabetes, and high blood pressure. By accurately predicting body fat percentage, healthcare providers can make informed decisions about patient's health and provide tailored treatment plans to help manage their health risks. I placed 2<sup>nd</sup> out of 23 teams by a score of 4.153.

## EDUCATION & CERTIFICATION

### **Master of Science in Data Science (Information Science)**

8/2022 - 5/2024

University of North Texas

Texas

*Areas of Interest: Machine Learning, Deep Learning, Tableau, Power BI, SQL, Big Data Analytics, AWS, GCP, Python, Spark, NLP*

### **Bachelor of Technology in Electronics and Computer Science**

7/2013 - 5/2017

PVP Siddhartha Institute of Technology

India

*Areas of Interest: Algorithms, Data Structures, Software Engineering, Digital Image Processing, Math, Computer Networks*

- **Master's Program - Data Scientist: Simplilearn** Certified in collaboration with IBM.

## LEADERSHIP EXPERIENCE

### **Vice President**

8/2023 - 5/2023

Data Science Organization - University of North Texas

Texas

- Directed the data science graduate students to participate in events and conduct the Kaggle competitions and Seminars from Industry experts, resulting in a 98% success rate and an average attendance increase of 20% year over year.

## PUBLICATIONS

- Crime Data Visualization Using Virtual Reality and Augmented Reality
- Data Analysis and Visualization of Crime Data
- Situational Awareness and Feature Extraction for Indoor Building Navigation using Mixed Reality

## POSTERS

- **ATSIRE: Advanced Tracking System with Intelligent Resume Embeddings**
- Data Analysis and Visualization of Crime Data