

Venkata Sai Kiran Sharma

Data Scientist

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I am a seasoned Data Scientist with over 8+ years of experience, holding a master's degree and a postgraduate diploma in AI. My career has spanned diverse industries such as CPG, insurance, e-commerce, and banking. I am focused on leading data science initiatives and mentoring emerging talents in the field, for more details just [embark here](#).

Experience

AI Researcher, AI Hub, Canada 

2023 – Present

Highlights

- Crafted LLM reports for a roster of close to 10 clients, enhancing business outreach and solutions.
- Demonstrated exceptional research acumen that garnered a \$1.75 million grant from TAC for the company.
- Engineered integrated banking, retail and e-commerce solutions that significantly increased business profitability.

Projects

Course Recommendation, E-Commerce

- Designed a recommendation system for an education sector client, achieving a 20% increase in lesson engagement and a 15% growth in new subscriptions, substantially elevating revenue.
- This strategic implementation led to marked improvements in course enrollment and completion, contributing to a significant revenue boost for the company.

Technologies: Hybrid Models, python, Reporting, flask, HTML, Cassandra, Talend, Tableau

Digital Humans, Virtual Reality

- Led the development of realistic digital human avatars using ZeroEggs and BEATS datasets, enhancing user engagement in VR and AI interfaces.
- Implemented AI-driven real-time interaction capabilities for digital humans, achieving seamless natural language and gesture recognition using LLM models.

Technologies: Machine Learning, Natural Language Processing, Python, Unity 3D, Virtual Reality SDKs

Teaching Assistant, MIT professional learning, Canada 

2023 – Present

Designation - Teaching Assistant

- Weekend mentoring sessions for the Applied Data Science Programs, focusing on intensive skill development.
- Collaborative coding workshops in data science, solidifying real-world applications.

Data Scientist, Tiger Analytics 

2019 – 2023

Highlights

- Mentoring initiative for the team, fostering skill and team development.
- Revamped retail demand forecasting, automating over 40 models for sales and workforce management in 450 stores.
- Enhanced insurance fraud detection with a achieving a 30% referral acceptance rate in SIU.
- Optimized insurance claims triage, leading to a 15% process efficiency gain with ensembled model solution.

Projects

Demand Forecasting, CPG

- Developed comprehensive labor forecasting models for a key CPG client, enhancing inventory and sales strategy planning.
- Constructed and automated labor forecasting models for 60 stores, successfully expanding the process to 450 stores for streamlined workforce management.
- Created sophisticated forecasting models for transactions, gross sales, item quantities, and Limited Time Offer (LTO) items, optimizing product availability and sales opportunities.

Technologies: Prophet, Deep AR, SARIMAX, AWS Sagemaker, python, Tableau, Reporting, informatica, Business Insights

Catalog Management, Retail

- Re-engineered real-time demand and response models for clothing and accessories in retail sector with customer segmentation, enhancing catalog management and market adaptability.
- Redefined modeling techniques using Sagemaker, developing over 40 classification and regression models to optimize catalog accuracy and customer targeting.

Technologies: Boosting classifiers, Regressors, PySpark, AWS Sagemaker, Tableau, Cohort Analysis, Customer Journey Mapping

Auto Fraud Detection, Auto Insurance

- Innovated in the Insurance sector by developing a model to effectively detect fraud in Auto Bodily Injury cases, thereby enhancing the decision-making process in SIU and CRO.
- Enhanced the insurance fraud detection system, effectively reducing false positives and increasing the acceptance rate of non-fraudulent claims by 30%.
- Facilitated round table discussions to develop business rules, crucial for strengthening the insurance company's fraud mitigation strategies.

Technologies: Boosting Classifiers, python, Tableau, Reporting, AWS EMR, Oracle SQL

Home Loan Defaulter, Banking

- Led the development of a predictive model using logistic regression and random forest algorithms, analyzing 3 years of data from 50,000 home loan accounts, focusing on crucial predictors like credit score and debt-to-income ratio.
- Achieved 78% accuracy in predicting potential loan defaulters, resulting in a 15% reduction in new bad loans and significantly aiding the bank in risk mitigation and financial stability.

Technologies: Python, Pandas, SQL, AWS Lambda, AWS S3, Logistic Regression, XG Boost Classifier

Data Scientist, Open Access Technology India

2018 – 2019

Highlights

- Developed predictive models for an energy company, enhancing forecasting accuracy by 30% in energy demand and production.
- Innovated energy forecasting algorithms, yielding a 25% improvement in resource allocation and grid management.
- Created an conceptual AR application for a Energy client, enhancing field experience with detailed guidance for a seamless rectification of field operations.

Software Engineer, Data Science, ProArch IT solutions

2016 – 2018

Highlights

- Developed an innovative chatbot that efficiently handled administrator-level tasks such as password resets, streamlining ticket resolution processes.
- Created an AR application for a retail client, enhancing customer experience with detailed guidance for a seamless in-store journey.

CRM Practitioner, Data Science, Concentrix

2015 – 2016

Highlights

- Assisted the team in developing an automated solution for display advertisements, involving analysis and tagging of ads to streamline the segmentation process and eliminate irrelevant imagery.

Education

PG diploma	Artificial Intelligence Design and Implementation	Durham College, Canada	2023
Masters	Artificial Intelligence and Machine Learning	Birla Institute of Technology, India	2022
Bachelors	Electronics and Telecommunication Engineering	Jawaharlal Nehru Technological University, India	2015

Skills

Languages	Python, R, SAS, JavaScript
Technologies	Django, Flask, Node.js, TensorFlow, PyTorch, Keras, Hugging face, LLM, Tableau, Streamlit, Microsoft Office, Athena, AWS Lambda, pyspark, ETL pipeline, Tableau, Quicksight, Glue jobs, EMR, ECR, Databricks, Talend, Cassandra
Deployment	AWS, Azure, GCP, Docker, Automation, Sagemaker, Databricks
Quantitative Methods	Machine Learning, Data Analysis, Deep Learning, Data Visualization, Artificial Intelligence, Feature Engineering, Regression, Statistical Modelling, Classification, Clustering, Time Series Forecasting, Natural Language Processing, LLM, and Regression Modelling, Statistical Analysis, Reporting Analysis, Query writing, Analytical solution building, Market Segmentation
Modelling skills	Demand forecasting, Recommender systems, customer segmentation, catalog modeling, risk assessment models, fraud analytics, LLM solutions, text analytics, attrition modeling, anomaly detection, price optimization, marketing mix modeling, and credit risk modeling

Certifications

- AWS Certified Cloud Practitioner (Amazon Web Services, Dec 2021)
- Big Data Foundations - Level 1 (IBM, Nov 2018)
- Applied Data Science with Python - Level 2 (IBM, Oct 2018)
- Machine Learning with Python - Level 1 (IBM, Oct 2018)
- Python for Data Science (IBM, Oct 2018)
- Exam 533: Implementing Microsoft Azure Infrastructure Solutions (Microsoft, May 2017)
- MCSA: Cloud Platform - Certified 2017 (Microsoft, May 2017)
- Exam 532: Developing Microsoft Azure Solutions (Microsoft, Apr 2017)

Volunteer Experiences

- Volunteered for college orientation and participated in Science Rendezvous 2023, engaging with the community, and promoting the wonders of science through interactive activities.
- Volunteered for college orientations, open houses actively contributing to the smooth transition and positive experience of incoming students.

References

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