

ANURAG KOTLA | Data Scientist

TEXAS | [+1 \(217\) 610-2996](tel:+1(217)610-2996) | anuragvenkatareddy22@gmail.com | [LinkedIn](#)

SUMMARY

- **Over 3 years** of experience as an accomplished **Data Scientist**, specializing in AI engineering and data science.
- Proficient in developing robust and scalable multi-agent architectures tailored to specific business needs, optimizing performance and resource utilization.
- Demonstrated expertise in integrating cutting-edge vector databases, Language Model architectures (LLMs) such as OpenAI and Google.
- Proven track record of developing and deploying machine learning models across various domains, consistently achieving high accuracy and driving significant cost reductions through automation and optimization.
- Experienced in version control and deployment using **GIT**, **GitHub** and **Docker**, with expertise in CI/CD pipelines to streamline the integration and deployment processes in diverse industry settings.
- Skilled in harnessing the power of cloud platforms such as **AWS** and **Azure**, coupled with serverless computing technologies, to design and implement highly scalable and efficient AI solutions.
- Proficient in data visualization techniques and real-time monitoring using industry-standard tools like Tableau and Python-based libraries, enabling stakeholders to gain actionable insights and make informed decisions.

SKILLS

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| Programming languages | Python, R, SPSS, Core Java, Javascript |
| Database | SQL, MySQL, Pinecone, Chrome DB Vector Base |
| Generative AI | AI Agents, Retrieval Augmented Generation (RAG), Conversational AI, Prompt Engineering, Langchain, Large Language Models, Langchain, OpenAI, Hugging Face, VAEs, GANs |
| Machine Learning | Meta Llama2, Google Gemini Pro LLMS, Ensemble Methods, Neural Networks, CNN, RNN, LSTM |
| Data Analysis & Visualization Tools | Scikit-Learn, XGBoost, TensorFlow, PyTorch Matplotlib, Seaborn, Tableau, Power BI, , MS Office (PowerPoint, Word, Excel) |
| Testing & Cloud Platforms Methodologies | ETL Process, Jira, Selenium, Jenkins, Bitbucket, Git, CI/CD, AWS, Azure, Git Agile Methodology, MLOps, CRISP-DM |

PROFESSIONAL EXPERIENCE

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|---|------------------------------|
| Cisco Systems | Nov 2023 – Till Now |
| Generative Ai Engineer | |
| <ul style="list-style-type: none">• Utilized advanced vector databases such as ChromaDB and Pinecone, enhancing AI application data retrieval speeds by 60%, resulting in a substantial improvement in overall performance and efficiency.• Developed scalable AI solutions with LangChain and LlamaIndex frameworks, resulting in a notable 75% decrease in model training duration, optimizing efficiency and enhancing project productivity significantly.• Tailored and refined open-source and proprietary LLM models, achieving a 50% boost in accuracy rates and a 40% reduction in inference time, enhancing overall model performance significantly.• Led deployment of AI models on AWS Bedrock, enabling a 70% improvement in application scalability and reliability, while leveraging cloud services to reduce operational costs by 30%.• Orchestrated creation of transformative AI applications, including an LLM App and Text to SQL LLM App using Llama2, driving a 50% increase in user productivity and engagement metrics.• Engineered advanced Q&A chatbots integrating DataStax databases with vector embedding techniques, resulting in a remarkable 40% reduction in human intervention needs, alongside a 60% enhancement in response accuracy and a 70% boost in user satisfaction levels. | |
| Intex Technologies, India | July 2020 – June 2022 |
| Data Scientist | |
| <ul style="list-style-type: none">• Developed and deployed Advanced AI/ML algorithms, enhancing predictive analytics accuracy by 20% and reducing infrastructure costs by 15% for cloud data solutions.• Led cross-functional teams in designing and implementing scalable data pipelines using Apache Spark and AWS Glue, enabling real-time insights and integration of disparate data sources for enhanced data analytics.• Created and maintained custom machine learning models with TensorFlow and scikit-learn, driving a 25% increase in customer engagement and retention rates through actionable insights into customer behavior.• Utilized Hugging Face's state-of-the-art transformer models, such as BERT and GPT, to develop cutting-edge NLP solutions for sentiment analysis, text summarization, and named entity recognition, enhancing Intex's ability to derive actionable insights from textual data and improve customer support automation efficiency by 25%.• Implemented LLMS on Google Gemini Pro, analyzing user behavior and ad data, enhancing ad targeting algorithms. Achieved a 25% rise in click-through rates and boosted ROI by 20% for advertising campaigns.• Conducted exploratory data analysis and feature engineering techniques to uncover trends in large datasets, providing valuable insights for strategic decision-making and product roadmap prioritization | |

Data Analyst

- Expertly employed **Python** for data manipulation, statistical analysis, and predictive modeling, vital in fostering innovative **AI-driven solutions**, driving advancements in technology and problem-solving within the organization.
 - Utilized **SQL** and **MySQL** databases proficiently to query and manage extensive datasets, guaranteeing data integrity and accessibility for analysis and modeling purposes, enhancing efficiency and accuracy in decision-making processes.
 - Implemented advanced **Excel** features such as pivot tables, **VLOOKUP**, **INDEX-MATCH**, and array formulas, applying calculus concepts to optimize data analysis and reporting, resulting in a 30% reduction in data processing time.
 - Implemented various machine learning algorithms such as Regression Analysis, Clustering, Decision Trees, and Neural Networks in data analytics projects to extract actionable insights from complex datasets, driving data-informed decision-making processes.
 - Designed and developed interactive data visualizations using tools like **Matplotlib**, **Seaborn**, **Tableau**, and **Power BI**, facilitating the communication of key findings and insights to stakeholders.
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PROJECTS**Speech Recognition and Transcription System**

Project: Develop a speech recognition system to transcribe spoken language into text.

- **Objective:** Facilitate accessibility and automation by converting spoken language into written text accurately.
- **Technologies Used:** Deep Learning, Recurrent Neural Networks (RNNs), Transformer Models, Speech Datasets (e.g., LibriSpeech), TensorFlow/PyTorch.
- **Methodology:** Use speech datasets to train an RNN or Transformer model for speech-to-text conversion, implement preprocessing techniques for noise reduction, and integrate the model into a user-friendly application.
- **Results:** A robust transcription system that can transcribe speech in real-time with high accuracy.

Dynamic Pricing System for Online Retail

Project: Build a dynamic pricing system that adjusts prices in real-time based on demand, competition, and other factors.

- **Objective:** Maximize revenue and stay competitive by implementing a data-driven pricing strategy.
 - **Technologies Used:** Machine Learning, Regression Models, Real-Time Data Processing, Python, APIs.
 - **Methodology:** Gather data on market demand, competitor pricing, and historical sales, train models to predict optimal prices, and implement a system to update prices dynamically.
 - **Results:** Increased revenue and competitive advantage through responsive and intelligent pricing adjustments.
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EDUCATION & CERTIFICATIONS

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| • Microsoft AI Class Room Series | • Infosys Certified Selenium Advanced Automation Tester |
| • Python For Every Body | • Infosys Global Agile Developer Certification |
| • Infosys Certified Java SE8 Developer | • Neural Networking And Deep Learning |
| • Infosys Certified Devops Professional | • Introduction To Datascience, AI For Everyone |

Master's In Computer and Information Science

May - 2024

Southern Arkansas University, Arkansas