



Analytics Specialist

M.B.A, Delhi School of Management (Formerly DCE)
B.E. Electronics & Comm., Anna University

Nishant Guvvada

+91-7982647321

nishant.guvvada@gmail.com

PROJECTS

MACHINE LEARNING:

- Enterprise BI Chatbot: A chatbot for code rewriting** and dataset summarization using natural language queries.
 - Designed a **RAG-based** AI chat system leveraging **PaLM2** and **LangChain's RetrievalQA**, with **Vertex AI Vector Search** enabling semantic indexing across 50K+ datasets. Enhanced response relevance by 20% through **context-aware generation**.
- Sales AI Assistant: AI-enabled sales chat application** augmented with data stored in **vCore for Azure Cosmos DB for MongoDB**.
 - GPT-4-powered sales chatbot (**gpt-4-32k**) using **Azure OpenAI**, leveraging **text-embedding-ada-002** embeddings stored in **Azure Cosmos DB** vector index for contextual product recommendations and query resolution.
 - Deployed **React frontend** on **Azure App Service** and containerized backend on **Azure Container Apps**.
- Agentic Travel Bot: A chat assistant** utilizing tool calling for accurate and precise travel information.
 - Implemented using **gemini-1.0-pro-001** on **Vertex AI Agent Builder**, integrating **conversational agent** with tool calling to fetch weather, holiday, place, and hotel information.
- Note Taking AI Agent:** A note-taking application powered by function-calling AI agent.
 - Built with **Next.js SSR** for optimized 40% faster load times and a **FastAPI** backend leveraging **PydanticAI** for response validation.
 - Incorporated **Redis** for efficient caching, **MongoDB** for storing AI-generated notes, and **JWT** for token-based authentication.
 - Deployed via **Docker** and **Kubernetes** to ensure scalability and high availability across environments.
- Customer Churn Prediction:** Advanced forecasting solution built on logistic regression algorithm using **Amazon SageMaker Pipelines**.
 - Ensured input consistency with **Feature Store** and optimized training via **SageMaker Training Jobs**.
 - Served predictions through a low-latency API, **reducing inference time by 30%**, with **Model Monitor** enabling **real-time drift detection**.
- Mortgage Approval Prediction:** An in-house prediction system for mortgage loan approvals
 - Engineered a logistic regression model with **Scikit-Learn** to enhance mortgage approval accuracy for internal use.
 - Optimized feature selection and model calibration, ensuring seamless integration with internal underwriting workflows for real-time assessments, improving decision reliability by **18%**.
- Sentiment Analysis for NPS Comments:** Thematic analysis of NPS comments summarized for actionable insights and business intelligence
 - Developed a sentiment analysis system for reviews leveraging **BigQueryML** to perform **thematic analysis processing 10K+ comments**.
 - Utilized **Power BI** to visualize and present the final insights of the summarized thematic analysis results.

FULL-STACK:

- E-Commerce Platform:** Platform for grocery shopping with **Razorpay integration**, featuring **JWT authentication**, a **Redis-powered order queue improving fulfillment by 40%**, and a **React-Redux frontend optimizing API efficiency by 30%**.
- To-do Application:** A task management application with a **FastAPI server**, Celery-Redis for async task execution reducing sync time by 60% and React UI with efficient task prioritization.
- Hotel Review Platform:** Platform enabling users to authenticate, submit reviews and upload photos. Architected the frontend with **React** and constructed the backend with **Node.js**, leveraging **MongoDB** for user data storage.
- Network-Logistics: An e-commerce platform** connecting travelers with users for international item delivery, eliminating shipping costs. Developed the frontend with **Next.js** and assembled the backend using **Express.js with Stripe integration** for secure payments.

EXPERIENCE

Rackspace	March 2022 - Present	Analytics Specialist
Better Mortgage Corporation	November 2020 – March 2022	Analytics Developer
EY Global Delivery Services	February 2019 – November 2020	Analyst
S&P Global Market Intelligence	June 2016 – June 2017	Research Associate

SKILLS (TECH-STACK)

Front-End: React, Next.js, JavaScript, Tailwind
Back-End: Express, Node.js, FastAPI, PostgreSQL, MongoDB
AI/ML: Scikit-Learn, Tensorflow, Keras, Vertex AI, Amazon Sagemaker & Bedrock, Azure AI Studio, PydanticAI, LangChain, PGVector, Kubernetes

EDUCATIONAL QUALIFICATIONS

MBA, Finance & IT 2014-2016	DSM, DTU, New Delhi (7.3 CGPA)
B.E. Electronics & Comm. 2010-2014	Anna University, Chennai (6.9 CGPA)

CERTIFICATIONS & COURSES

- Certified **AWS Solutions Architect Associate (SAA-C03)**, **AWS AI Practitioner (AIF-C01)** and **Azure AI Fundamentals (AZ-900)**.
- Certified **Tableau Data Analyst** and graduated from **Google Immersive Advanced Solutions Lab for Machine Learning Cohort**.