VIVEK KUMAR

Senior Data Scientist | Generative AI Specialist

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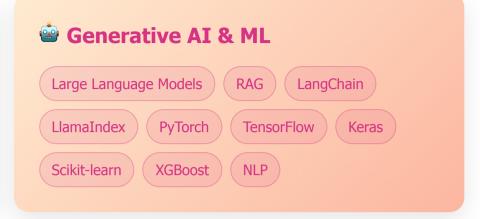
FROFESSIONAL SUMMARY

Results-driven Senior Data Scientist with **7+ years of expertise** in Generative AI, Machine Learning, and MLOps. Proven track record of delivering high-impact AI solutions that drive operational efficiency and cost reduction. Specialized in Large Language Models (LLMs), Retrieval-Augmented Generation (RAG), and multi-agent architectures. Successfully led cross-functional teams to deploy scalable AI systems across telecommunications and analytics domains.



V CORE COMPETENCIES











PROFESSIONAL EXPERIENCE

Senior Data Scientist

Fractal Analytics, Gurgaon

Nov 2023 - Present

- Architected and deployed advanced predictive models using state-of-the-art machine learning algorithms, resulting in 25% improvement in model accuracy
- Collaborated with cross-functional teams to streamline data processing workflows, reducing processing time by 40%
- Delivered data-driven solutions that enhanced decision-making capabilities and operational efficiency across multiple client engagements
- Mentored junior data scientists on best practices in ML model development and deployment

Data Scientist

Ericsson, Noida

Nov 2021 - Oct 2023

- Led AI model development initiatives to enhance customer experience and operational efficiency for telecommunications clients
- **Designed and executed A/B testing strategies** that improved user experience metrics by 30%
- ▶ Automated data classification workflows using NLP techniques, reducing manual effort by 60%
- Created interactive dashboards and visualization tools for stakeholder reporting and decision support

Data Scientist

Milliman, Gurgaon

Apr 2020 - Oct 2021

- Performed comprehensive statistical analyses driving actionable insights and operational strategy improvements
- ▶ Built interactive dashboards using Power BI and Tableau to support data-driven decision making
- Developed predictive models for risk assessment and actuarial analysis in insurance domain

Software Engineer

Sep 2018 - Mar 2020

Conduent, Gurgaon

- Utilized SQL and Python for large-scale data manipulation, analysis, and ETL pipeline development
- Conducted statistical analyses that enhanced customer experience and operational metrics
- Implemented data quality frameworks ensuring 99.5% data accuracy across processing pipelines

©* KEY PROJECTS & ACHIEVEMENTS

1. Billing SLM: AI-Powered Customer Billing Solution | Verizon

- Fine-tuned Phi-3.5-mini model using Supervised Fine-Tuning (SFT) to resolve customer billing queries from complex JSON data
- Automated bill summary generation and structured data creation using BigQuery, improving processing efficiency by 50%

- > Standardized diverse billing formats for efficient LLM training and inference across multiple systems
- Reduced context length by 50%, significantly improving response speed and model efficiency

Impact: Achieved 85%+ accuracy on contextual billing Q&A, improved query response time, and reduced operational costs

Technologies: Phi-3.5-mini, Gemini Flash, Python, GCP, JSON, SFT

2. Network Genie: Generative AI Platform for Field Engineers | Verizon

- Developed a comprehensive AI platform for field engineers and executives to streamline information retrieval and enhance operational efficiency
- Designed and implemented RAG system for generating contextually relevant responses to technical and executive queries
- ▶ Built multiple specialized agents for different data sources, optimizing query routing and response accuracy
- Reduced system latency by 30% through optimized retrieval processes and caching mechanisms

Technologies: GPT-3.5-turbo, BAAI/bge-small-en-v1.5, Python, LangChain, FAISS

3. Reliability: Anomaly Detection for Sensor Data | C3 AI

- **Designed and implemented autoencoder models** to accurately reconstruct sensor data addressing highdimensional, noisy, and missing data challenges
- Achieved 25% reduction in false positives compared to traditional anomaly detection methods
- ▶ Enhanced sensor network reliability by reconstructing missing or corrupted sensor readings with 95% accuracy

Technologies: TensorFlow, Keras, PySpark, Python

4. Intelligent Field Work-Order Optimization | Ericsson

- **Developed predictive models** to optimize operational costs by intelligently prioritizing relevant work orders
- Leveraged advanced NLP techniques for analyzing unstructured text data, resulting in 35% cost savings
- > Improved operational efficiency by reducing work order volumes through data-driven prioritization strategies



Master of Science (MSc) in Financial Engineering

WorldQuant University | Expected Apr 2027

Post Graduate Diploma (PGDM) in Business Analytics

Alliance University, Bangalore | Completed Jan 2022

Post Graduate Program (PGP) in Data Science

Springboard, Bangalore | Completed Nov 2020

Bachelor of Technology (B.Tech) in Computer Science & Engineering

IMS Engineering College | Completed Jun 2017

CERTIFICATIONS

- Machine Learning Advanced
 Level Ericsson
- Building End-to-EndGenerative AI Applications -Analytics Vidhya
- RAG Systems Using LlamaIndex
 Analytics Vidhya

Machine LearningExperienced Level - Ericsson

▼ Building LLM ApplicationsUsing Prompt Engineering -Analytics Vidhya



- **Patent Granted: "Operation Prediction in Wireless Communication Network"**
- ★ Star of the Month Award for outstanding contributions to AI/ML projects
- Successfully led 15+ high-impact AI and machine learning projects across telecommunications and analytics domains
- Recognized for developing scalable and efficient data science solutions that drove business value

TECHNICAL KEYWORDS

Machine Learning • Artificial Intelligence • Deep Learning • Natural Language Processing • Large Language Models • Generative AI • RAG • LangChain • Python • SQL • TensorFlow • PyTorch • MLOps • Cloud Computing • Data Science • Predictive Analytics • Anomaly Detection • Statistical Modeling • A/B Testing • Data Visualization