Contact

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www.linkedin.com/in/rahulsinghbana (LinkedIn)

Top Skills

BigQuery Cloud Storage

Data Engineering

Languages

Hindi

English

Certifications

Develop Generative Al Applications: Get Started

Build RAG Applications: Get Started

Agentic AI with LangChain and LangGraph

Fundamentals of Building Al Agents Vibe Coding Using Various Coding Platforms

Rahul Singh Bana

Al Engineer | Generative Al | LLMs | RAG | Al Agents | Python | GCP Ghaziabad, Uttar Pradesh, India

Summary

I am a Technical Lead passionate about leveraging Machine Learning, Deep Learning, and Generative AI to build production-grade AI solutions that drive automation, intelligence, and efficiency across enterprises. I enjoy exploring new technologies and tackling complex challenges that translate cutting-edge AI research into real-world impact.

Over the years, I have designed and implemented end-to-end AI solutions — from data preparation and model development to deployment and monitoring — across diverse domains like digital media, energy, and utilities. My work spans applied research, architecture design, and integration of GenAI systems with enterprise data platforms.

Key Projects & Contributions:

Document Intelligence System: RAG-based platform using local LLMs for multi-format document summarization, semantic search, and Q&A.

LocalGenDB (Text-to-SQL): Converts natural language queries into PostgreSQL statements with schema-aware context generation.

Intelligent Healing System: Uses historical ServiceNow data to identify similar incidents and recommend resolution steps via vector similarity search.

DB Digital: Built personalized recommendation engines, content classification, and sentiment analysis models to enhance user engagement and streamline editorial workflows.

Landis+Gyr: CRM ticket classification models, predictive substation load forecasting, and dynamic Tableau dashboards for business insights.

Core Expertise:

Machine Learning, Deep Learning, Generative AI | RAG Systems & LLMs (Llama, Gemini, Mistral) | LangChain | Vector Databases (ChromaDB, PostgreSQL pgvector) | Python, FastAPI, React | AWS Cloud Services | NLP

I thrive on learning new technologies, experimenting with hybrid and local AI architectures, optimizing model pipelines, and delivering AI systems that make a measurable difference in enterprise environments.

Experience

Landis+Gyr
Techical Lead Data Analyst
October 2023 - Present (2 years 1 month)
Noida, Uttar Pradesh, India

I'm a Technical Lead specializing in Machine Learning, Deep Learning, and Generative AI, with a strong focus on building practical, production-grade AI systems. My role involves exploring and developing AI use cases that drive automation, intelligence, and efficiency across organizational workflows.

I have hands-on experience designing and implementing end-to-end AI solutions — from data preparation and model development to deployment and monitoring. My current work spans applied research, architecture design, and integration of GenAI systems with enterprise data platforms.

Key Projects:

Document Intelligence System – A RAG-based platform leveraging local LLMs for document summarization, semantic search, and Q&A across multi-format documents (PDF, DOCX, PPT, TXT).

LocalGenDB (Text-to-SQL) – Converts natural language queries into PostgreSQL statements using LLMs and schema-aware context generation.

Intelligent Healing System (In Progress) – Uses historical ServiceNow data to identify similar incidents and recommend resolution steps via GenAl and vector similarity search.

Core Expertise:

Machine Learning, Deep Learning, and Generative AI

RAG systems, LLMs (Llama, Gemini, Mistral, etc.), and LangChain

Vector Databases (ChromaDB, PostgreSQL pgvector)

Python, FastAPI, and React-based AI application development

I'm passionate about experimenting with local and hybrid Al architectures, optimizing model pipelines, and bringing cutting-edge Al capabilities into real-world enterprise environments.

DB Digital
Senior Machine Learning Engineer
March 2021 - October 2023 (2 years 8 months)
Noida, Uttar Pradesh, India

Thrilled to be driving innovation at DB Digital!

I worked as a Machine Learning Engineer at DB Digital, applying specialized ML/AI experience (backed by 13+ years in the broader tech industry) to enhance the digital products of India's largest newspaper group.

My mission is to use data science to deliver highly personalized and organized content experiences.

My Core ML Stack:

Deep Learning (TensorFlow/Keras)

Natural Language Processing (NLP)

Python

AWS Cloud Services

Projects I'm leading to enhance user experience:

Personalized Recommendation Engine: Building models to ensure millions of readers see the most relevant news, directly boosting platform engagement and time-on-site.

News Category Classification: Implementing advanced NLP to instantly and accurately tag news, streamlining editorial workflows and improving content discovery.

Content Sentiment Analysis: Developing systems to measure and analyze real-time public sentiment, providing critical feedback to continually refine our content strategy.

Landis+Gyr Senior Data Analyst June 2018 - February 2021 (2 years 9 months) Noida Area, India

While working at Landis+Gyr (Energy Management/Smart Metering), I: Developed and deployed Speech-to-Text capabilities using AWS services. Built and trained models for CRM Ticket Classification and comprehensive Customer Feedback Analysis.

Engineered a predictive model for Substation Load Forecasting using Python, TensorFlow, and Keras.

Visualized key business and project metrics by creating dynamic Tableau dashboards.

RenovITe Technologies Inc Senior Software Engineer April 2017 - June 2018 (1 year 3 months) Noida Area, India

RenovITe Technologies provides Software development services, mostly in payment domain. I used to work for Westfield Group and OneMarket client. There I got opportunity to work on Customer Review analysis and Westfield Product analysis. I used NLP techniques to develop solution for both the issues. I tried different approaches for feature generation using Count Vector, TF-IDF and Word Embedding.

Accelity Ventures Pvt Ltd Project Lead June 2016 - April 2017 (11 months) Noida Area, India

Established the comprehensive project structure and blueprint by first defining and understanding overall functional requirements.

Coordinated effectively with cross-functional design and development teams to ensure all requirements were met within specified deadlines.

Maintained code quality and compliance by conducting regular, rigorous code reviews.

Mentored and guided developers on writing clean, clear, and efficient code.

Fostered a positive and collaborative environment by engaging and encouraging all team members.

Collaborated directly with App Developers on specific mobile initiatives.

Compunnel Software Group, Inc.
Senior HTML Developer / Senior UI Developer
July 2014 - June 2016 (2 years)
Noida Area, India

Compunnel is Software/ Web development organization. Mostly work in elearning domain. During my day to day activity involves solutions of assigned tickets, meeting with clients for further enhancements in developed products. There I learned Angularjs, Responsive UI development, App development Hybrid.

Work on UI development

Create Responsive layout for all devices iPhone, iPad etc.

Create iPhone app Layout using Angularjs

Working on jQuery, javascript, Angularjs, Bootstrap

Meeting with product owner regarding product enhancements and additional requirements

Tathastu Online Web Services Pvt Ltd (Leading SEO Company in INDIA)

Web Designer/UI Developer April 2012 - July 2014 (2 years 4 months)

Delhi Area, India

Tathastu Online Web services is a Software, Web Portal development organization. There I developed website using jQuery/Javascript, CSS3,

HTML, php, wordpress. My day to day work involve maintenance of developed portals as well as Adhoc requirements.

iGennie Technical Services Private Limited Web Designer/Developer July 2009 - March 2012 (2 years 9 months) Noida Area, India

iGennie is a Software, Web Portal development organization. There I developed website using jQuery/Javascript, CSS3, HTML, php, wordpress. My day to day work involve maintenance of developed portals as well as Adhoc requirements.

Education

Krishna Engineering College
Bachelor of Technology (B.Tech.), Computer Science and
Engineering · (2005 - 2009)