

PANKAJ KUMAR PRAMANIK

AI & Data Engineer | Generative AI | MLOps | Cloud Automation Specialist

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SUMMARY

I am an experienced Data Engineer, Generative AI Developer, and Full-Stack Engineer with over 7 years of expertise in building scalable data pipelines, AI-powered applications, and cloud-based MLOps solutions. Proficient in machine learning and data processing, my work emphasizes automation, analytics, and cloud technologies, AWS, GCP, and Azure.

EXPERIENCE

Generative AI, LLM & MLOps | Data Engineering & Analysis | n8n Automation Expert

Upwork

⌚ 01/2025 - Present

Freelance platform

- Built RAG systems with LangChain, vector DBs (Pinecone, FAISS), and GPT-4 while automating workflows via n8n, Retell AI, and Google Workspace
- Developed end-to-end GenAI apps for legal intake, customer support, and lead qualification using voice & chat agents
- Applied MLOps tools like MLflow, DVC, Kubeflow, and AWS SageMaker for model deployment, monitoring, and version control
- Used Apache Airflow, dbt, Pandas, and BigQuery for ETL, data transformation, and scalable analytics
- Leveraged data analysis tools including Power BI, Tableau, Jupyter, and Pandas for business insights and decision-making

Generative AI & Full Stack Developer

SubHub

⌚ 05/2024 - 01/2025

Software development company

- Developed AI-driven solutions using LangChain, Pinecone DB, and Lang Flow
- Built real-time applications with Supabase and PostgreSQL
- Integrated Twilio for SMS notifications and Eleven Labs for voice capabilities
- Designed scalable AI solutions with Python, Next.js, and Supabase

Machine Learning Engineer

Most Loved Workplace

⌚ 05/2023 - 12/2023

Technology company focused on creating a better workplace

- Developed Statistical Machine Learning and Data Mining solutions
- Designed and implemented analytical models for predictive analytics
- Built data visualization dashboards using Python (Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn)

Full Stack Engineer

Crewfare

⌚ 08/2022 - 04/2023

Travel and experience company

- Developed RESTful APIs and Web Services using Node.js
- Built serverless applications leveraging AWS Lambda, S3, and EC2
- Designed and developed React-based SPAs for scalable applications

LANGUAGES

English

Proficient



German

Beginner



Bengali

Native



SKILLS

GitHub MLOps AWS GCP

Azure ETL Pipelines Jenkins

Snowflake Apache

LLM Fine-tuning Apache Spark

Kafka Airflow Batch dbt

PostgreSQL Google BigQuery NIFI

Kinesis RabbitMQ AWS Redshift

Databricks Apache Beam

Microsoft Power BI Tableau

QuickSight NLP TensorFlow

PyTorch N8N Keras

Scikit-learn XGBoost MLflow

Python Data Analysis Flask

LangChain React Next.js

React Native Docker Kubernetes

PROJECTS

Voice AI Agent

Voice AI Agent for CRM Calls & Workflow Automation

- Developed an AI-powered voice agent using Retell AI and n8n to handle lead calls and automate CRM actions in GoHighLevel
- Included LLM-based conversation handling, call routing, and webhook-driven workflows

EXPERIENCE

3D Web Graphics & Blockchain Developer

Vircadia

11/2021 - 08/2022

Open-source virtual reality platform

- Created smart contracts using Solidity programming
- Developed DAPP applications using HTML, JavaScript, and Node.js with Ethereum Blockchain
- Built interactive 3D environments using Three.js, Babylon.js, WebGL, and OpenGL
- Optimized 3D rendering for blockchain-based metaverse applications
- Designed and presented sessions on Bitcoin and Ethereum protocols for various agencies

Sr. Software Engineer (React Native, Node, AWS)

Breaker Nation

11/2020 - 02/2022

Automotive industry solutions

- Developed UI for large-scale automotive applications using React Native
- Implemented custom Push Notifications, RESTful APIs, and React-Native-Camera interactions
- Refactored error handling, reducing user input errors by 44%
- Lead a team in adopting React Native best practices for performance and scalability
- Optimized app navigation using React Navigation for improved user experience

EDUCATION

B.Sc. in Data Science and Artificial Intelligence

Indian Institute of Technology Guwahati

08/2023 - 08/2026

B.Sc. in Mechanical Engineering

Khulna University of Engineering and Technology

04/2010 - 04/2015

KEY ACHIEVEMENTS

Visa Prediction Accuracy

Achieved 87% accuracy in predicting U.S. visa approvals using MLOps pipeline.

Poultry Disease Detector

Achieved 93% accuracy in poultry disease detection using CNN.

Enhanced Movie Recommendations

Improved movie recommendation accuracy by 22% using hybrid system.

Error Reduction Achievement

Reduced user input errors by 44% through error handling refactor.

PROJECTS

Telegram Notion AI Chatbot

Telegram Notion AI Chatbot with n8n Automation

- Built a n8n-powered Telegram chatbot integrated with Notion and OpenAI
- Enabled real-time task logging, knowledge retrieval, and user interaction through automated flows

AI-Powered Medical Chatbot

AI-Powered Medical Chatbot

- Enhanced query resolution efficiency by {40%} using LangChain and Pinecone for intelligent medical chatbot.
- Reduced manual triage time by {30%} by deploying Flask backend on AWS with Docker and CI/CD for real-time responses.

Uber Data Analytics

Uber Data Analytics | Modern Data Engineering GCP Project

- Built ETL pipeline with Mage.ai, data warehousing with BigQuery, and real-time dashboards with Looker Studio on Google Cloud Platform

US Visa Approval Prediction

US Visa Approval Prediction

- Built an end-to-end MLOps pipeline to predict U.S. visa approvals using applicant data
- Automated data workflows with Airflow, trained XGBoost models tracked via MLflow, and deployed on AWS with Docker and CI/CD
- Achieved 87% accuracy with continuous monitoring and retraining

Chicken Disease Detector

Chicken Disease Detector

- Developed a CNN-based system to detect poultry diseases with 93% accuracy
- Used ResNet50 with transfer learning, automated deployment via Kubeflow and Docker, and served real-time predictions through FastAPI optimized with Tensor RT

Movie Recommendation System

Movie Recommendation System

- Improved user engagement by {25%} by developing a hybrid recommender system combining collaborative and content-based filtering.
- Used SVD and TF-IDF similarity on Movie Lens data, deployed via Flask API and React dashboard, and improved recommendation accuracy by 22%.

09.11.2025

Signed with SELISE

