

PANKAJ KUMAR PRAMANIK

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

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SUMMARY

I am an AI and Data Engineer with 8 years of experience in software, automation, and cloud solutions. My background includes 5 years in Full-Stack Development building scalable applications and backend systems. Over the last 3 years, I have shifted my focus to AI and Data Engineering, working on n8n, AI agents, workflow automation, Generative AI, data engineering, MLOps, machine learning, and deep learning. My latest academic degree is also focused on Data Science and AI. I now specialize in building data pipelines, AI-powered applications, agentic systems, and cloud-based AI solutions across 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 SPA for scalable applications

LANGUAGES

English

Proficient



German

Beginner



Bengali

Native



SKILLS

AI, ML & AI Agents

LLM Fine-tuning

NLP

TensorFlow

PyTorch

Keras

Scikit-learn

XGBoost

LangChain

LangGraph

CrewAI

LlamaIndex

Data Engineering

ETL Pipelines

Spark

Kafka

Airflow

dbt

NiFi

Beam

Batch

Databricks

PostgreSQL

BigQuery

Redshift

MLOps, DevOps & Cloud

MLOps

MLflow

Jenkins

Docker

Kubernetes

GitHub

AWS

GCP

Azure

Automation

n8n

Claude

CRM

Retell AI

Backend & Analytics

Data Analysis

Power BI

Tableau

QuickSight

Looker Studio

Python

Flask

FastAPI

React

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

2023 - 2027

B.Sc. in Mechanical Engineering

Khulna University of Engineering and Technology

2009 - 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

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

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%.

Signed with SELISE