

DEEPANSHU KANDPAL

Senior Machine Learning Engineer & Data Scientist

Email: dkandpalz@gmail.com Phone: +91-8087669991 Location: Mumbai, Maharashtra Portfolio: deepskandpal.github.io LinkedIn: linkedin.com/in/deepanshu-kandpal GitHub: github.com/deepskandpal Visa: Eligible for work authorization, open to relocation (USA, Canada, UK, EU, Australia)

PROFESSIONAL SUMMARY

ML Engineer with 8+ years building production-scale AI systems across cybersecurity, e-commerce, and telecom domains.

Specialized in **LLMs**, **generative AI**, and **ML infrastructure** with demonstrated business impact. Creator of **LangChef**, an open-source platform for LLM experimentation. Expert in scalable ML architectures on AWS/GCP/Azure with proven record of delivering high-reliability systems.

SKILLS

Programming & Cloud

Python SQL R Swift AWS SageMaker
Lambda GCP Azure ML

DevOps & MLOps

Docker Kubernetes Terraform CI/CD Git
MLflow

ML/DS Techniques

Deep Learning LLMs NLP A/B Testing
Computer Vision

ML System Design & Tools

PyTorch TensorFlow LangChain RAG Systems
Vector DBs GPT-4 Distributed Training
Model Serving

EXPERIENCE

Senior Machine Learning Engineer

KnowBe4

2024 – Present

Bangalore, India

AI Workflow Optimization & Security Intelligence

- Developed **LangChef**, an open-source LLM orchestration framework integrating RAG, prompt engineering, and evaluation capabilities, reducing development time by **40%** and improving tracking by **60%**. (github.com/deepskandpal/LangChef)
- Engineered AWS SageMaker solution with custom CV algorithms for image processing, achieving **90%+ accuracy** in detecting manipulated logos, and implemented **AIDA Orchestration Agents** that automated security testing workflows with event-driven architecture, reducing manual effort by **75%**.
- Created comprehensive ML pipeline documentation and best practices that reduced onboarding time by **30%** while establishing standardized approaches for model development, testing, and deployment.

Machine Learning Engineer, Experimentation

FarFetch

2022 – 2024

Gurugram, India

Scaling Data-Driven Experimentation and Model Deployment

- Led development of a high-throughput experimentation platform handling **100,000+ daily queries** and **300TB of data**, influencing **20%** of critical business decisions, while reducing ML deployment cycle time by **50%** through containerization and AKS migration.
- Designed and implemented a hybrid vector search system using Azure OpenAI GPT-4, Vespa.ai, and LangChain, resulting in a **35%** improvement in search relevance and more personalized user experiences.
- Authored detailed engineering documentation on "Bayesian A/B Testing at Scale," implementing MSPRT frameworks for efficient multi-armed bandit experimentation that became a reference for experimentation teams.

Data Scientist, AI-COE Marketing Analytics

Accenture

2021 – 2022

Mumbai, India

Innovative Market Segmentation and Sales Prediction

- Engineered a multi-modal deep learning classifier (CNN+LSTM) for retail outlet categorization with 92% accuracy, and built end-to-end sales prediction models on GCP with CI/CD integration, achieving 15% increase in market penetration.
- Developed geospatial analytics solutions using QGIS and GeoPandas, processing terabytes of data to increase resource allocation efficiency by 20% and optimize marketing spend.

Machine Learning Engineer, JIOML

Jio Platforms (Reliance Jio)

2017 – 2021

Mumbai, India

Pioneering AI-Driven NLP Solutions

- Led development of LSTM-based models with custom FastText embeddings, improving chatbot accuracy by 20%, and optimized ML systems for Jio Interact, reducing IVR call durations by 30%.
- Architected NLP infrastructure with BERT and GPT-2 models, improving inference performance by 40%, and served as iOS Developer (2017-2018) building Universal Search for MyJio app and creating a Celeb Bot application using Swift.

EDUCATION & CERTIFICATIONS

Bachelor of Engineering

Savitribai Phule Pune University, MIT Academy of Engineering

2013 – 2017

Pune, India

Electronics and Telecommunication Engineering | First Class

Certifications

- Advanced NLP with Transformers (2023)
- Statistical Methods for Data Science (2022)
- AWS ML Specialty (2023, Score: 900+)
- ML System Design - Stanford Online (2022)

TECHNICAL PROJECTS & PUBLICATIONS

- LangChef** - Creator of open-source LLM workflow framework integrating RAG pipelines, prompt engineering, and evaluation metrics. Used by security teams and shared with the broader ML community.
- ML Infrastructure at Scale** - Engineering blog contribution with practical examples of robust ML pipelines, referenced in multiple tech talks (2022).
- ML System Design Case Studies** - Technical blog posts on architecting production ML systems, focusing on scalability and reliability.
- Feature Engineering for Telecom** - Internal whitepaper detailing best practices for processing telecom data, distributed to 200+ engineers (2019).