# Sumeet Khatri

# Machine Learning Engineer | MLOps | System Design | Al-Agent

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Pune

in Linkedin

GitHub

Portfolio

kaggle Kaggle

#### **PROFESSIONAL SUMMARY**

Machine Learning Engineer with hands-on experience in building, deploying, and scaling end-to-end AI systems. Skilled in computer vision, MLOps, and realtime model serving using FastAPI and Streamlit. Delivered AI solutions achieving 92% AUC in credit scoring and 98% accuracy in healthcare prediction, with measurable business impact.

# **Projects**

# Large Language Model (LLM) Fundamentals & Construction Exploration $\mathscr{D}$

- Gained comprehensive understanding of Large Language Models (LLMs), covering tokenizer pipelines, dataset preparation, pretraining objectives, and model architectures.
- Explored model training workflows, optimization techniques (AdamW, mixed-precision), and evaluated trade-offs in transformer-based architectures (BERT, GPT).

# News Summarizer, NLP ⊘

- Built an abstractive summarization tool using BartForConditionalGeneration from HuggingFace to generate concise, real-time news highlights.
- Deployed via Streamlit to provide interactive summaries of trending articles, leveraging news APIs and dynamic NLP pipelines.

#### **Toxic Comment Classification Web App** *⊘*

- Built and deployed a multi-label NLP model to classify comments into toxic categories using BERT & HuggingFace Transformers; fine-tuned on Kaggle's Jigsaw dataset.
- Developed a real-time Streamlit interface to flag abusive language; implemented precision-optimized model validation and class balancing for productiongrade moderation.

## Credit Risk Modeling ⊘

- Engineered a credit risk scoring model using LightGBM and logistic regression, achieving 92% AUC on imbalanced datasets.
- Incorporated Weight of Evidence (WoE) transformation and hyperparameter tuning with Optuna to optimize for regulatory transparency.

#### **Car Damage Detection** *⊘*

- Built a real-time car damage assessment system using ResNet50 for multi-class image classification (dent, scratch, broken).
- Achieved 93% test accuracy; deployed with FastAPI backend and Streamlit UI, offering sub-200ms inference time for insurance applications.

# **Professional Experience**

# Software Engineer Intern-Deloitte Australia, Virtual Internship India

- Analyzed 10M+ sensor records using PySpark, improving efficiency by 40%.
- Built KPI dashboards with Power BI and automated reports
- Proposed AWS pipeline (Kinesis, Lambda, Redshift) cutting costs by 30%.
- Facilitated workshops and wireframe creation in Figma.

# **Technical Skills**

- Languages: Python, C++
- ML & DL: Scikit-learn, TensorFlow, PyTorch, XGBoost, LightGBM, CNNs, NLP, Transformers
- MLOps & Deployment: FastAPI, Streamlit, REST APIs, Git, ML Pipelines, CI/CD Pipelines, Cloud, Model Deployment
- Data Engineering: PySpark, Data Preprocessing, Feature Engineering
- Foundations: System Design, OOP, Data Structures & Algorithms (DSA)
- Generative AI: Feature Engineering, Development Al-Agent, Langchain, Langgraph, Vector Database, LLMs, Retrieval Augmented Generation (RAG), Model Context Protocol (MCP), CrewAI

## **Education**

B.Tech IT, Indus University 07/2022 - 07/2026 | Ahmedabad

#### **Certificates**

#### **Deloitte**

Virtual internship providing hands-on experience in data processing

Course focused on DSA concepts using C++

## **Master in Machine Learning**

Completed project-based course covering core ML algorithms, pipelines, and model deployment strategies.