Ashutosh Kumar

AI/ML Engineer Intern | GenAI • NLP • Python

Bhubaneswar, Odisha (Current) | Chaibasa, Jharkhand (Permanent)

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PROFESSIONAL SUMMARY

Final-year B.Tech student in Computer Science and Data Science with a CGPA of 8.8, currently working as an AI/ML Intern. Hands-on experience in building machine learning and NLP-based solutions using Python, with practical exposure to GenAI concepts, model development, and API-driven AI applications. Strong foundation in data preprocessing, EDA, and deploying ML workflows, with a keen interest in developing scalable AIML systems.

SKILLS

- **Programming Languages:** Python, SQL
- **Machine Learning & AI:** Supervised and Unsupervised Learning, Model Training and Evaluation, Feature Engineering
- **Natural Language Processing (NLP):** Text preprocessing, tokenization, embeddings (foundational)
- **Generative AI & LLMs:** Prompt engineering, LLM-based applications, AI Agents (foundational)
- **Data Processing & Analysis**: Data Cleaning, Exploratory Data Analysis (EDA), Statistical Analysis
- **Python Libraries & Frameworks:** Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn, Flask
- **Databases & Cloud:** MySQL, MongoDB, AWS (basics)
- **Development** Tools: Git, GitHub

EXPERIENCE

Unified Mentor | Data Analyst Intern ⬤   05/2024 - 06/2024

Performed data cleaning and exploratory data analysis using Python and SQL, and assisted in building basic machine learning models with Scikit-learn.

Neural Row | AI Engineer Intern ⬤   11/2024 - 02/2025

- Developed a Python-based AI agent for video transcription and summarization using Whisper and LLM APIs.
- Automated Telegram messaging workflows using the Telethon library, reducing manual effort by ~40%.

Advanze | AI/ML Engineer Intern⬤ (Full-Time, On-site)   12/2025 - 06/2026

- Built an OCR-based document processing pipeline using Tesseract OCR and Python to extract, clean, and structure text from scanned PDFs and images.
- Developed a Retrieval-Augmented Generation (RAG) system using vector embeddings and similarity search to enable accurate, context-aware question answering over extracted documents.

PROJECTS

AI-Powered YouTube Idea Generator⬤

- Built An AI-powered YouTube Video Idea Generator that combines FastAPI backend and Streamlit frontend to create trending,audience-specific video ideas.
- It integrates multiple APIs including YouTube, SerpAPI, and OpenAI for comprehensive content suggestions. Easily deploy locally withstep-by-step setup for rapidvideo content brainstorming.

GreenVision: Forest Cover Type Prediction ⬤

- Developed a machine learning model to predict forest cover types (7 different tree species) from geographical data using Python, scikit-learn, and pandas, achieving high accuracy for ecological assessment and wildfire prevention
- Built an end-to-end system with FastAPI backend, MongoDB, AWS deployment and interactive web interface for real-time forest management predictions.

SEO Content Generator Agent⬤

- Developed an AI-powered Video SEO optimization application using Python and Streamlit to analyze YouTube videos and generate SEO-optimized titles, tags, descriptions, timestamps, and content recommendations using LLMs.
- Implemented agent-based workflows and multi-model AI integration to perform content analysis and generate thumbnail concepts, enabling scalable and automated video SEO optimization.

AgentX – AI-Powered Content Creator ⬤

- Built an autonomous multi-agent content generation system that transforms a topic into a fully researched, SEO-optimized blog with AI-generated visuals..
- It integrates multiple APIs including YouTube, SerpAPI, and OpenAI for comprehensive content suggestions.

EDUCATION

B.Tech, Computer Science & Data Science CGPA 8.8 / 10	2022-2026	
GITA Autonomous College, Bhubaneswar		
Class 12 (Higher Secondary Certificate) Percentage: 64.6%	2020-2022	
SJ DAV Public School, Chaibasa, Jharkhand		
Class 10 (Secondary School Certificate) Percentage: 86.1%	2019 -2020	
SJ DAV Public School, Chaibasa, Jharkhand		

ACHIEVEMENTS & CERTIFICATIONS

DATA SCIENCE MASTERS - PWSKILLS ⬤

DATA ANALYTICS COURSE - PWSKILLS ⬤

GENERATIVE AI WITH NLP, AGENTIC AI AND FINE TUNING EURON ⬤

PROJECT COMPLETION - NEURAL ROW ⬤

MASTERING THE POWER OF ARTIFICIAL INTELLIGENCE COURSE- PWSKILLS ⬤

GENERATIVE AI CERTIFICATION BOOTCAMP - EURON⬤