

KULDEEP SINGH

+91 8810587776 | kuldeep_singh@outlook.com | linkedin.com/kuldeep-singh | github.com/kuldeep059

EDUCATION

AMITY University	Noida, India
<i>Master of Computer Applications - Machine Learning and A.I: CGPA: 7.4</i>	<i>Jan 2024 - Dec 2025</i>
Shree Guru Gobind Singh Tricentenary University	Gurgaon, India
<i>Bachelor of Computer Applications - Cloud Computing : CGPA: 7.8</i>	<i>Jun 2020 - Jul 2023</i>

PROFESSIONAL EXPERIENCE

Full-Stack Developer Intern <i>Sgn Office Automation</i>	<i>Aug 2023 - Feb 2024</i> Delhi, In
<ul style="list-style-type: none">Created and maintained websites and School Management ERP using HTML, CSS, Bootstrap, ReactJs, JavaScript, PHP, MongoDB, and Laravel 9.Utilized Google Firebase, Google APIs, AWS, and Azure for deployment and implemented CI/CD practices for efficient and scalable development workflows.Worked on AI-driven projects like Solar Industry AI Assistant and Smart Recipe Generator, leveraging LLMs, RAG, and beginner-level LangChain for intelligent solutions.Gained hands-on experience with FastAPI, pytest, and SQL (MySQL / PostgreSQL) to build and test scalable APIs.Implemented data integration, prompt engineering, and structured output generation using LLM pipelines.	
Cloud Computing Intern <i>Corizo</i>	<i>Jan 2023 - March 2023</i> Virtual

• Worked on projects leveraging **AWS and Azure**, expanding websites, **creating AWS S3 storage buckets**, and **deploying virtual machines** on Mac OS, Linux, and Windows platforms.

• **Designed and implemented** a chatbot using **Amazon Lex**, enhancing user interaction through **intelligent automation**.

PROJECTS

Hybrid Cloud AI Engine React, Python, Docker, OpenCV, Vercel, Render	<i>Dec 2025 - Jan 2026</i>
<ul style="list-style-type: none">Architected a decoupled hybrid-cloud system using Vercel for the React frontend and Dockerized Render for the Python/Node.js AI background removal engine.Implemented precise product segmentation using the OpenCV GrabCut algorithm and enabled seamless API	
Weather Vista App Python, HTML/CSS, Azure Cosmos DB, Azure App Service	<i>Oct 2025 - Nov 2025</i>

• Developed and deployed a weather app leveraging **Flask on Azure App Service** with OpenWeatherMap API and integrated CI/CD via **GitHub Actions**.

• Secured API keys with Azure Application Settings and operated **Azure Cosmos DB** for data storage, with monitoring and logging through **KUDU & Azure portal**.

Solar Industry AI Assistant | Python, Streamlit, OpenRouter API, OpenAI (GPT-4o) Aug 2025 - Sep 2025

- Engineered an AI-powered Streamlit application to analyze satellite imagery, leveraging **OpenRouter API** with **GPT-4o Vision** for precise rooftop solar potential assessments.
- Implemented advanced prompt engineering to synthesize structured JSON output from the LLM, enabling accurate calculation of panel count, energy production, installation costs, and ROI.

KEY ACHIEVEMENTS

- Ranked among the **Top 300 in Engineering (1M+)** and **Top 440 globally (1.9M+)** on Unstop, with **165+** certifications; secured Rank **94/4,000** in the **Code Conquest DSA Challenge**.
- IndiGo Hack to Hire Hackathon:** Built a real-time flight tracking web app ; **Top 200 project**.

TECHNICAL SKILLS

- Programming Languages:** Python, JavaScript (Node.js)
- Frameworks & Libraries:** React 19, Vite, Express, OpenCV (cv2), NumPy, Tailwind CSS v4, Django, Flask, FastAPI, Streamlit
- Databases:** MySQL, PostgreSQL, MongoDB
- DevOps & Cloud Technologies:** AWS (EC2, S3, Lambda, EKS, CloudWatch), Vercel, Render, Azure App Service, Docker, Kubernetes, Git, GitHub Actions (CI/CD)
- Other Tools:** REST APIs, JSON, GitOps, Ansible, Linux, Nginx, Multer, Child Processes
- Core Competencies: Backend Development, Computer Vision (Image Segmentation), API Integration, Hybrid Cloud Deployments, Object-Oriented Programming, Debugging & Optimization, Database Design