

# KULDEEPSINGH

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## EDUCATION

### AMITY University

Noida, India

Master of Computer Applications - Machine Learning and A.I : CGPA: 7.4

Jan 2024 - Dec 2025

### Shree Guru Gobind Singh Tricentenary University

Gurgaon, India

Bachelor of Computer Applications - Cloud Computing : CGPA: 7.8

Jun 2020 - Jul 2023

## PROFESSIONAL EXPERIENCE

### Full-Stack Developer Intern

Aug 2023 - Feb 2024

Sgn Office Automation

Delhi, In

- **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

Jan 2023 - March 2023

Corizo

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

Dec 2025 - Jan 2026

- **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

Oct 2025 - Nov 2025

- **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