

# KUNAL PRATAP SINGH

Knowledge Park 3, Greater Noida 201308

✉ [kunalpsingh25@gmail.com](mailto:kunalpsingh25@gmail.com)

in [linkedin.com/in/kunal-pratap-singh](https://www.linkedin.com/in/kunal-pratap-singh)

github.com/kunal2504java

## Education

**G.L Bajaj Institute of Technology and Management**

*Bachelor of Technology in Computer Science*

**November 2022 – August 2026**

*Greater Noida, Uttar Pradesh*

## Professional Summary

A Computer Science student with a strong foundation in software engineering, machine learning, and full-stack development. Experienced in designing and building scalable, data-intensive applications. Successfully created award-winning projects, earning top placements in competitive hackathons. Eager to apply technical skills within an engineering team to tackle meaningful challenges and drive technological innovation.

## Experience

**Hopscotch Games**

**August 2025 – Present**

*AI Developer*

*Remote*

- Architected advanced prompt chaining and context management strategies for a multi-LLM backend, minimizing context rot and reducing generative hallucinations by over **50%** in complex game creation workflows.
- Implemented significant performance improvements for the browser-based generative engine, cutting memory consumption by **25%** and increasing the success rate of complex, multi-asset game generation by **40%**.

**Big Startups Network**

**January 2025 – August 2025**

*Software Developer Intern*

*Noida, Uttar Pradesh*

- Restructured and deployed scalable backend services for a data-intensive application, improving overall system throughput by **15%** in a GCP environment.
- Collaborated and documented robust RESTful APIs using FastAPI to serve machine learning models, achieving **99.5%** uptime and handling over **5,000** daily requests.
- Enhanced deployment efficiency by 10% through automation of testing processes, while also decreasing production bugs by **20%** by conducting peer code reviews and providing mentorship.

## Projects

**Synapse: AI-Powered Supply Chain Platform** | *Python, React, FastAPI, 3D Vis, ML*

**June 2026**

- Engineered a full-stack, AI-powered supply chain platform using **React** and **FastAPI**, featuring an interactive **3D visualization** layer that reduced data analysis time for users by **35%**.
- Implemented a predictive analytics pipeline using **Python** that achieved **91%** demand forecasting accuracy, directly enabling a "self-healing" system to cut potential stockout events by **20%**.

**MediBud AI: Medical Chatbot & Report Analyzer** | *Python, LLMs, LangChain, NLP, Generative AI*

**May 2025**

- Streamlined a scalable backend with an **NLP** pipeline to process unstructured medical records, slashing data retrieval times by **50%** and improving data accessibility by **40%**.
- Deployed a **Generative AI** conversational agent using LangChain; this reduced average query resolution time by 30 seconds, boosting user satisfaction scores by 8 points on post-interaction surveys.

**Zentigrity: AI and Blockchain for Governance** | *TypeScript, Python, Solidity, Next.js, System Design*

**April 2025**

- Spearheaded an end-to-end decentralized system combining a **Next.js** dashboard with a **Python AI agent** and **Solidity** smart contracts, achieving a **30%** reduction in data validation latency.
- Secured **3rd position** in the Supernova Hackathon (1400+ teams) for a novel civic technology application, receiving positive feedback from 10+ judges and driving 75+ user registrations during the event.

**DermaScope: Skin Cancer Detection using CNN** | *Python, PyTorch, Flask, CNN, React.js*

**March 2025**

- Innovated a full-stack deep learning solution with **PyTorch** and **Flask**, delivering a **93%** classification accuracy on the ISIC dataset while maintaining API response times under **300ms**.
- Awarded '**Best Theme**' prize among **1000+ teams** at the SGU Hackathon, recognizing the project's significant social impact and its seamless user experience design.

## Technical Skills

**Languages:** Python, Java, C++, JavaScript, TypeScript, SQL, Solidity

**Backend Development:** Node.js, Flask, FastAPI, Spring Boot, REST APIs

**Frontend Development:** React, Next.js, JavaScript, HTML/CSS, Svelte

**AI and Machine Learning:** PyTorch, TensorFlow, Scikit-learn, LLMs, LangChain, NLP (spaCy, NLTK), OpenCV

**Core CS and Systems:** Data Structures, Algorithms, OOP, Design Patterns, System Design, Scalability

**DevOps and Databases:** Docker, Git, GCP, AWS (Familiar), Kubernetes, PostgreSQL, MongoDB