Krishnanshu Khanna

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Full-stack developer and ML enthusiast with 2+ years of experience building scalable applications and leading technical teams. Education

Vellore Institute of Technology, Vellore

2022-2026

B. Tech in Computer Science and Engineering spl. IoT, CGPA: 9.25

GMSSS-21A, Chandigarh and Bhavan Vidyalaya, Panchkula

2022 and 2020

Class 12th Percentage: 93%, Class 10th Percentage: 94%

Experience

DIC MDaRT Lab, UIET Chandigarh | Summer Research Intern - AI/ML

June 2025 - July 2025

- Preprocessed and cleaned large-scale textual and image datasets, enhancing input quality for a multimodal AI system leveraging U-Net for medical image segmentation.
- Designed and implemented a prototype application integrating an AI-powered RAG chatbot with Expo, enabling efficient remote triage for over **20+ skin conditions**.

Ernst & Young LLP | Summer Intern - Tech Consulting

June 2024 - July 2024

- Analyzed ERP implementation strategies for power sector utilities to enhance operational efficiency.
- Created technical documentation and conducted business process analysis for SAP solutions.

keyNcoders, VITTBI | Frontend Developer Intern

April 2024 - July 2024

- Built 10+ reusable **React.** is components, improving development speed by 30%.
- Integrated REST APIs and incorporated responsive design, reducing page load times by 40%.

Technical Projects

CVHelper: AI Resume Builder | Next.js, TypeScript, PostgreSQL, Langchain, OpenAI

Live Demo | GitHub

- Built a full-stack, AI-powered resume builder with Langchain RAG chat, Gemini-based Q&A for mock interview, drag-and-drop UI, and real-time PDF export.
- Added Clerk authentication, Stripe payments, and PostgreSQL with Prisma ORM; scaled to 300+ users, 1.7K+ views, and avg. session time of 1.50 min.

MELDify: Video Sentiment Analyzer | FastAPI, Docker, AWS, BERT, Next.js

Live Demo | GitHub

- Developed a sentiment classification pipeline using multimodal fusion and BERT to analyze emotions from video, audio, and text; achieved 70% accuracy.
- Deployed FastAPI backend on AWS EC2 using Docker; used NextAuth, private API key auth, and real-time quota tracking.

MicroBlogX: Microservices Blog Platform | Node.js, RabbitMQ, Redis, Docker, AWS

Live Demo | GitHub

- Architected a real-time blog app using RabbitMQ on AWS for inter-service communication, Redis caching, and a hybrid database (PostgreSQL + MongoDB) setup on Render.
- Containerized services with **Docker** and deployed on **Render**, achieving **99.9% uptime** through automated health monitoring and recovery mechanisms.

Skills Summary

Languages: JavaScript, TypeScript, Python, Java, HTML/CSS, SQL

Web Technologies: React.js, Next.js, Node.js, Express.js, Tailwind CSS, Responsive Design, REST APIs, Microservices

Databases: MongoDB, PostgreSQL, Redis, Prisma ORM, Firebase

ML/AI: TensorFlow, PyTorch, Scikit-learn, BERT, NumPy, Pandas, Computer Vision, NLP

Tools: Git, GitHub, Postman, RabbitMQ, Auth0, Stripe, JWT, AWS, Docker, Kubernetes, Vercel, CI/CD

Soft Skills: Leadership, Event Management, Writing, Public Speaking

Relevant Coursework

- Data Structures and Algorithms
- Software Engineering
- Object Oriented Programming
- Database Management System
- Machine Learning
- Computer Networks

- Operating Systems
- IoT Programming
- Artificial Intelligence

Certifications

- Machine Learning Specialization DeepLearning.AI
- Complete Full-Stack Web Development Bootcamp Udemy

Extracurricular Activities

• Vice Chairperson, Soft Computing Research Society, VIT Vellore: Led team of 30+ members and managed society operations, events, and technical workshops. Organized major technical event during Gravitas with 250+ paid registrations.