Nikhil Yadav

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Education

Motilal Nehru National Institute of Technology Allahabad	*2024 – 2028*
B.Tech in Electronics and Communication Engineering	*CPI: 8.73 till Semester 2*
Patanjali Rishikul, Prayagraj	*2023*
CBSE Class XII	*Percentage: 94%*
Patanjali Rishikul, Prayagraj	*2021*
CBSE Class X	*Percentage: 96%*

Projects

CareSight – Eye-Controlled Connected Care 🌐
- Enables ventilated and immobile patients to communicate via eye movements.
- Tech stack: Next.js, Supabase, face-api.js.
- Features: Admin/Nurse dashboards, patient entertainment; structured relational DB linking hospitals, nurses, patients, medications, and alerts.

CoPilotX – Multi-Agent AI Startup Workspace 🌐
- AI agents (CEO, CTO, CMO, CFO) collaborate in a Slack-like UI to help users build and grow startups.
- Tech stack: React, LangGraph, Mermaid, Markdown
- Designed agents with distinct roles using LangGraph + ReAct workflows.
- Implemented export system to auto-generate ZIP packs with business plans, slides, logos, and tech specs.

StorageCube – Smart Cloud Storage Platform 🌐
- Built a secure cloud storage app with file management, real-time insights, and Stripe payments.
- Tech stack: Next.js, Tailwind CSS, MongoDB, Cloudinary, Stripe, JWT, Nodemailer
- Implemented OTP-based auth, file upload/share/rename, and usage tracking.
- Integrated Stripe for plan upgrades with webhook support and responsive UI.

Contextual File Searcher (MCP) ⓞ
- Model Context Protocol tool for intelligent file discovery using semantic and keyword relevance.
- Tools: Python, Sentence-Transformers, PyPDF2, Openpyxl, FastMCP, JSON
- Supports diverse formats (.pdf, .docx, .xlsx, .txt, code files)
- Computes hybrid relevance scores using semantic similarity, filename matching, and keyword frequency.

Technical Skills

Programming Languages: Python, C, C++, HTML5, CSS3, JavaScript
Frontend Technologies: React.js, Next.js, HTML5, CSS3, Tailwind CSS, Redux, Three.js, React Three Fiber
Backend Technologies: Node.js, Express.js, MongoDB, PostgreSQL, Supabase, Redis, FastAPI, Cloudinary
Machine Learning & AI: TensorFlow, Scikit-learn, Pandas, NumPy, OpenCV, Deep Learning, LangChain, LangGraph
DevOps & Tools: Git, GitHub, Docker, Postman
Specializations: Full Stack Development, Machine Learning, GenerativeAI

Achievements

- **First Place:** Turing's Playground (CaptchaCracker, Feb 2025), RoboSoccer (Avishkar, Nov 2024)
- **Second Place:** Hacktivate (SafeStride, Apr 2025)

Certifications

- Machine Learning by Andrew Ng — Coursera (Dec 2024 – Mar 2025)