

RITHWIIK REDDY GUDURU

Full Stack Developer| Python Developer| ML Developer

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Professional Summary

Computer Science graduate specializing in Python and Next.js development, with hands-on experience in building full-stack web applications and AI-integrated tools. Skilled in designing scalable backend systems and intuitive user interfaces using the MERN stack and modern frameworks. Experienced in developing NLP-powered features and integrating deep learning models, with a passion for leveraging AI and web technologies to create efficient, real-world solutions.

Technical Skills

Languages: Python, JavaScript, TypeScript, SQL, HTML5, CSS3, Java, C#

Frameworks/Libraries: Next.js, React.js, Node.js, Express.js, MERN Stack, Django, Prisma ORM, Figma, OpenCV, PyTorch

Databases: PostgreSQL, MongoDB

Tools/Technologies: Streamlit, Git, GitHub, VS Code, PyCharm, Visual Studio, Jupyter Notebook

Machine Learning & AI: PyTorch, NLP, Deep Learning (CNN, GPTs), OpenAI API, Hugging Face, LangChain, Generative AI

Operating Systems: Windows, Linux (Ubuntu), macOS

Methodologies: Agile, CI/CD, Version Control

Experience

AI Developer (Team Project) – Rewrite AI

Aug 2025 – Oct 2025

Tech Stack: Next.js, Gemini API, Firebase

- Developed backend API endpoints and implemented Retrieval-Augmented Generation (RAG) to generate accurate, context-aware flashcards from user PDFs.
- Collaborated in a 3-member team to integrate the backend with a Next.js frontend, ensuring seamless data flow and user experience.
- Designed and deployed an AI-powered educational web app that helps students revise efficiently through automatically generated flashcards.

Projects

Personalized Query System | Python, NLP, Groq API, BeautifulSoup, YouTube Transcript API

- Built a context-aware query system retrieving answers from weblinks and video transcripts.
- Applied NLP and information retrieval techniques for precise, unbiased results.
- Designed a Streamlit interface for scalable, real-time query processing.

Lead Manager – Web Application | Next.js, React, TypeScript, Node.js, Prisma ORM, PostgreSQL

- Developed a full-stack platform for managing real-estate buyer leads with strong validation and ownership control.
- Implemented server-rendered pagination, filters, and debounced search for fast lead discovery.
- Added CSV import/export with validation and transactional inserts for large datasets.

Supervised CNN Chess Model | Python, PyTorch, Deep Learning

- Built a CNN trained on millions of chess positions to predict optimal moves.
- Applied supervised learning to mimic human and engine play styles with high accuracy.
- Optimized architecture and preprocessing for fast, data-driven move predictions.

Job Management Admin Interface | Next.js,NestJS,React,Javascript,Prisma ORM, PostgreSQL

- Engineered a scalable full-stack Job Management Dashboard with pixel-perfect UI replication from Figma, ensuring responsiveness across devices.
- Developed RESTful APIs and database layer (NestJS, Prisma ORM, PostgreSQL) for transactional job creation and dynamic filtering by title, location, and salary.
- Implemented seamless real-time data sync between frontend (Vercel) and backend (Render), updating job lists instantly via client-side state management.

Synapse Code –AI Code Assistant | Node.js, Express, React, Groq AI, JavaScript

- Engineered a full-stack platform that converts natural language prompts in to well-formatted code with step-by-step explanations.
- Built a high-speed Node.js/Express API gateway to interface with the Groq LLM for low-latency code generation.
- Designed a modern UI with persistent chat history, collapsible sidebar, syntax highlighting, and developer tools for enhanced usability.

AI Chess Engine - Desktop Application | Unity, C#, Minimax, AI Search Optimization

- Developed a Unity-based AI Chess Engine with Minimax and Alpha-Beta Pruning for competitive gameplay and analysis.
- Implemented move ordering and iterative deepening to optimize decision-making efficiency.
- Designed an interactive GUI with gameplay and analysis modes to help players review games and improve strategies.

Education

Bachelor of Technology Computer Science and Engineering (AI & ML) CVR College Of Engineering, Hyderabad	CGPA: 8.01 / 10 June 2021 - May 2025
Telangana Board of Intermediate Education Class 12th Narayana Junior College, Hyderabad	Percentage:93% March 2019 - June 2021
Telangana Board of Secondary Education Class 10th Narayana High School, Hyderabad	CGPA: 9.5 / 10 June 2018 - March 2019