ROHIT KUMAR

Software Engineer | *Full-Stack & Robotics*

+91 8340241584 | rohit.kartik9@gmail.com | rohitkartik.in | linkedin.com/in/Rkartik9 | github.com/Rkartik9

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Python, Java, Bash
Frontend: React.js, Next.js, Tailwind CSS, Vite, HTML5, CSS3, Three.js
Backend: Node.js, Express.js, FastAPI, REST APIs, WebSockets, Serverless APIs
Databases: PostgreSQL, MongoDB, Drizzle ORM, SQL
AI: RAG, MCP, AI Agents, Tool Calling, OpenAI APIs, Claude, Embeddings, Vector Search
Tools: Git, Docker, Linux, Vercel, GCP, Postman, Figma, Blender, Claude Code

PROFESSIONAL EXPERIENCE

Software Developer Oct 2024 – Present
Orangewood Labs (Y Combinator W18) *Noida, UP*

- Build software for robotics applications across web interfaces, backend services, 3D simulation, and robot-hardware integration.
- Develop applications with Next.js, React, FastAPI, and Node.js, connecting user interfaces with robotics software, databases, real-time services, and physical hardware.
- Built RoboViewer, a desktop robotics platform for creating 3D workcells, importing CAD models, configuring robots and peripherals, and testing automation programs before deployment.
- Developed Three.js-based robot visualization and node-based programming, along with real-time communication between simulated programs and physical robots.
- Worked on sim-to-real workflows that allow programs created in simulation to be tested and executed on physical robot hardware.
- Built RoboGPT, a robotics platform that lets users interact with and program robotic systems using text and voice commands.
- Worked on retrieval, tool integrations, and application services connecting natural-language requests with robotics workflows.
- Used Claude Code and LLM-based tools for debugging, code generation, and day-to-day engineering work.

- **RoboViewer: Demo** Built a desktop application for robot simulation and offline programming. Supports 3D workcell design, CAD imports, robot and peripheral configuration, and testing programs before running them on physical hardware.
- **RoboGPT: Demo** Built application and backend features for a natural-language interface to robotic systems. Worked on retrieval, tool integrations, and workflows that allow users to interact with robots through text and voice commands.
- **Photobooth:** Built a robot-controlled photobooth application with automated image capture, session handling, and robot pose calibration.

Freelance Subject Matter Expert — Computer Networks May 2022 – Jul 2022
Chegg India *Remote*

- Solved computer science and networking problems and provided clear explanations for technical concepts.
- Wrote structured solutions covering computer networks and related computer science topics.

PROJECTS

Kosha | *Next.js, TypeScript, MongoDB, Node.js, Vercel* kosha.rohitkartik.in

- Built a platform for discovering developer tools and design resources using Next.js and MongoDB.
- Implemented server-side rendering, dynamic routing, responsive interfaces, and SEO-focused page architecture.

HousieCo | *Next.js, TypeScript, PostgreSQL, Drizzle ORM* housieco.com

- Built a full-stack real estate platform with a Next.js frontend and PostgreSQL backend using Drizzle ORM.
- Designed the product interface in Figma and implemented responsive layouts and reusable UI components.

Education

Noida Institute of Engineering and Technology — Greater Noida, UP
Bachelor of Technology in Computer Science Engineering | *CGPA: 8.2 / 10* — *2020 – 2024*

Certifications

Object Oriented Programming using Java | Coursera — May 2023
Introduction to NoSQL Databases | Coursera — May 2022

Additional Information

Languages: English (Professional Proficiency), Hindi (Native Proficiency)
Interests: Robotics, AI Systems, Developer Tools, 3D Systems, UI/UX Design, Music Production