

# Rishabh Gupta

✉ rishabhgupta4523@gmail.com | 🌐 rishabhguptajs.vercel.app | in rishabhguptajs | 🌐 rishabhguptajs

## Education

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|-----------------------------------------------------|-------------|
| <b>KIET Group of Institutions</b>                   | 2022 – 2026 |
| Bachelor's Degree in Computer Science & Engineering |             |
| CBSE Class 12th                                     | 2022        |
| CBSE Class 10th                                     | 2020        |

## Skills

**Languages:** JavaScript, TypeScript, PHP, Python, Java

**Technologies:** Generative AI, AI Agents, LLM Tool-Calling, CopilotKit, OpenAI API, ReactJS, NextJS, TailwindCSS, Shadcn, TanStack Query, Zustand, NodeJS, ExpressJS, Laravel, PostgreSQL, MySQL, MongoDB, pgvector, Redis, Supabase, Docker

**Software:** Git & GitHub, GitHub Actions, Postman, Docker Compose, Claude Code, Cursor IDE

## Work Experience

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| <b>Full Stack Developer</b> , Stockarea                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | May 2025 – Present    |
| <ul style="list-style-type: none"><li>Co-led the migration of a legacy <b>Vue.js</b> warehousing platform to <b>Next.js</b> and <b>TypeScript</b>, authoring <b>117 commits across 6 core modules</b> (Assets, Inventory, Orders, Inward/Outward, LMS and Tasks), including a resizable, drag-reorderable Control Tower grid and <b>Zustand</b> filter stores that persist state across tabs.</li><li>Built the <b>Zoho Books integration</b> and <b>OCR document pipeline</b> on a <b>Laravel</b> backend: two-way webhook sync of invoices, bills and purchase orders, plus an <b>n8n</b>-orchestrated workflow that extracts invoice line items and auto-maps them to catalogue products with confidence scoring, retry limits and duplicate-job constraints.</li><li>Owned the customer-facing <b>Next.js</b> portal end-to-end, shipping <b>10+ modules</b> (Kits, Suppliers, Inventory Hubs, Decasing, Dockets, Trips, Reports, Invoices) with typed API hooks, server-side search and pagination, and a shared table abstraction replacing per-page code.</li><li>Developed an <b>AI agreement copilot</b> using <b>CopilotKit</b> with typed lookup/write tools and a <b>human-in-the-loop</b> confirmation layer, then generalised the runtime, prompt and chat UI into a foundation reusable across modules.</li></ul> |                       |
| <b>Software Engineering Intern</b> , Simule                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Jan 2025 – Apr 2025   |
| <ul style="list-style-type: none"><li>Enhanced technical documentation and whitepaper, aligning them with core company objectives.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       |
| <b>Software Engineering Intern</b> , Medireg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Sept 2024 – Oct 2024  |
| <ul style="list-style-type: none"><li>Developed dynamic frontend components using <b>Redux</b> and <b>React-Flow</b> to optimize state and UI workflows.</li><li>Integrated RESTful APIs to streamline data exchange and improve application performance.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                       |
| <b>SWE Fellow</b> , Headstarter AI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | July 2024 – Sept 2024 |
| <ul style="list-style-type: none"><li>Spearheaded the development and deployment of <b>five AI projects</b> using ReactJS, Next.js and Firebase.</li><li>Co-developed a SaaS solution using <b>Llama 3.1</b> via the OpenRouter API, with a Paddle paywall.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                       |

## Projects

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| <b>toolharness</b> — Python, LLM-as-Judge, PyPI, CI                                                                                                                                                                                                                                                                                                                                                                                                                                   | Link <a href="#">🔗</a> |
| <ul style="list-style-type: none"><li>Built and published an open-source harness scoring <b>tool-call reliability</b> of agentic coding CLIs (Claude Code, Cursor, Codex) across <b>8 failure modes</b>, combining deterministic detectors with an LLM-judge layer.</li><li>Validated detectors against the <b>BFCL benchmark</b> with per-detector precision/recall/F1 and Cohen's <math>\kappa</math>; shipped a JSON report, an HTML dashboard and a CI regression gate.</li></ul> |                        |
| <b>China Bazar POS</b> — Tauri v2, React, TypeScript, SQLite, Drizzle                                                                                                                                                                                                                                                                                                                                                                                                                 | Link <a href="#">🔗</a> |
| <ul style="list-style-type: none"><li>Rewrote a legacy <b>VB6 + MS Access</b> retail system as an offline-first Windows desktop app across <b>12 modules</b> (billing, inventory, purchase, accounting, loyalty, shifts) for 4 stores.</li><li>Implemented <b>double-entry accounting</b>, <b>50+ PDF/Excel reports</b>, barcode scanning and Argon2id hashing; <b>295 commits</b> over a 10-week solo build.</li></ul>                                                               |                        |
| <b>PaisaTrack</b> — Next.js, TypeScript, PostgreSQL, LLM Tool-Calling                                                                                                                                                                                                                                                                                                                                                                                                                 | Link <a href="#">🔗</a> |
| <ul style="list-style-type: none"><li>Built a PWA that parses <b>plain-English</b> expense entries into categorised transactions, with recurring-subscription detection, budgets and trend analytics.</li><li>Designed a <b>tool-grounded Q&amp;A layer</b> where the model selects data slices but never computes; all aggregation runs server-side, eliminating a class of confidently-wrong numeric answers.</li></ul>                                                             |                        |
| <b>pgvec-studio</b> — Next.js, TypeScript, pgvector, UMAP                                                                                                                                                                                                                                                                                                                                                                                                                             | Link <a href="#">🔗</a> |
| <ul style="list-style-type: none"><li>Built a local-first visual explorer for <b>pgvector</b> embeddings: <b>UMAP</b> 2D projection, k-NN similarity search, metadata filtering and cosine-similarity inspection.</li></ul>                                                                                                                                                                                                                                                           |                        |

## Achievements

- Ranked 8th out of 250+ teams** at HackJNU (JNU, Delhi), building a VR-based travel webapp in 36 hours.
- Led a cross-functional team at the Headstarter AI fellowship to a startup project with **1000+ signups**.