# YUGAL

Software Developer
+91 89012 93583 | bansalyugal3@gmail.com | LinkedIn: linkedin.com/in/yugalb
GitHub: github.com/yugalbansal | LeetCode: leetcode.com/u/yugalbansal | Portfolio: yugalbansal.in

## CAREER SUMMARY

Computer Science undergraduate at Chitkara University (CGPA 9.75), focused on building scalable, high-performance applications integrated with AI. Skilled in Java, React, PostgreSQL, RAG and cloud deployment, with a strong grasp of system design. Aiming to bring that thinking and problem solving to real-world engineering as a software developer.

## EXPERIENCE

**Freelance Web Developer** | SRS Tech Fly (online data analytics training), Remote 01/2025 – 04/2025

- Built and deployed a complete **Next.js** website for an online data analytics trainer, with course pages, a course-finder quiz, lead capture forms, student login and SEO content pages.
- **What I Gained:** Delivering a full product to a real client, from requirements to deployment.

## PROJECTS

**ArchSight – Repository Intelligence Engine** – Academic Project | *archsight.vercel.app* 01/2026 – 04/2026

- Built the repository engine that downloads GitHub repositories and parses files into **ASTs** using **Web Tree-sitter (WASM)** across **13 language grammars**.
- Extracted nodes and edges for API routes, database calls, services, queues and external calls, and ran scans as background jobs with **BullMQ** and **Redis** with retry handling.
- **Tools:** TypeScript, Node.js, BullMQ, Redis. **Learnings:** AST-based code analysis and reliable background jobs.

**Autofy – Workflow Automation Platform** – Academic Project | *autofy-g1.netlify.app* 08/2025 – 11/2025

- Connected **5 services** (Gmail, Google Drive, Telegram, Reddit, Notion) in one workflow platform, implementing the **Gmail, Reddit and Notion integrations** end to end.
- Implemented **Supabase Edge Functions** and a **cron-based executor** for scheduled workflows, and co-built an **AI chatbot** that generates complete workflows from plain English using Gemini.
- **Tools:** React, TypeScript, Supabase, OAuth 2.0, Gemini. **Learnings:** OAuth flows and serverless scheduling.

**VectorMind – AI Study & Dataset Platform** – Live Project | *vectormind.site* 02/2025 – 06/2025

- Built and launched an AI study workspace that answers questions from PDF, DOCX, PPTX and TXT files using **RAG**, embeddings and **vector search** with source citations.
- Integrated client-side **Puter.js** AI inference with model fallback, and built **JSONL dataset generation** for fine-tuning and shareable chats secured with **Row Level Security**.
- **Tools:** React, Python, Supabase, Puter.js. **Learnings:** RAG retrieval, vector indexing and RLS security.

## ACHIEVEMENTS

- **SAP Hackfest Finalist**, 2026 – one of 10 teams selected from Chitkara University; built a red-teaming system that disrupts a medicine supply chain in simulation before the real world does, then suggests alternate suppliers.
- **HackIndia, Top 5 Team**, 2025 – built an attendance app that checks location, uses a QR code that changes every 10 seconds, and stores records on a smart contract.
- **Star Programmer Award**, 2025 – Department of CSE, Chitkara University; one of 50 students recognized.
- **Winner, Web Crafters 2.0**, 2025 – GeeksforGeeks Student Chapter.
- **2nd Place, BYTE BRAWL**, 2024 – GeeksforGeeks Student Chapter.

## EDUCATION

**Bachelor of Engineering (CSE)** – Chitkara University, Punjab 2028

- CGPA: 9.75 / 10 (through Semester 4)
- Key tools learned and used: Java, React, PostgreSQL, Git, Linux

## SKILLS

**Languages:** C, C++, Java, JavaScript, TypeScript, Python, SQL
**Web & Backend:** React, Next.js, Tailwind CSS, HTML, CSS, Node.js, REST APIs, Redis, BullMQ
**Databases:** PostgreSQL, MySQL, MongoDB, Supabase
**AI:** RAG, Embeddings, Vector Search, LLM APIs (Gemini, OpenRouter)
**Tools & Platforms:** Git, GitHub, Linux, Vercel, Netlify
**Core Subjects:** Data Structures & Algorithms, OOP, Operating Systems, DBMS, Computer Networks, System Design
**Soft Skills:** Team Leadership, Problem Solving, Communication, Ownership

## EXTRA-CURRICULAR ACTIVITIES

**Graphics Head** | Open Source Chandigarh, Chitkara University 09/2025 – Present

- Lead a **7-member team** handling the community's social media, event graphics and visual branding; learned to plan work, delegate and deliver on deadlines.