SAKSHAM AGRAWAL

ACADEMIC PROFILE

Degree/Certificate	Institution	Percentage/CGPA	Year
B-Tech	Chemical Engineering IIT (BHU), Varanasi	9.14	2027
CBSE (XII)	DALIMSS, Varanasi	93.00	2023
CBSE (X)	DALIMSS, Varanasi	96.80	2021

SKILLS

- **Languages** : C++, Python, JavaScript, TypeScript, Go, SQL
- **Technologies** : React.js, Next.js, Node.js, Express.js, EJS, Tailwind CSS, FastAPI, GoFr, LangGraph, Google ADK
- **Tools/Platforms** : Git, Github, Docker, Postman, Linux, MongoDB, Firebase, PostgreSQL, Redis, Vercel

INTERNSHIP/TRAINING

Software Developer Intern — Irisidea
May 2026 - July 2026

- Built **agentic CRM workflows** using **Pydantic** and **Google ADK** for context-aware customer management
- Integrated **Zoho CRM** with agent tools for **lead CRUD**, email sending, and one-time & recurring email **job scheduling**
- Engineered **dynamic UI rendering** using **structured data** for **intent-driven** agent interactions and CRM analytics
- **Exposure:** FastAPI, Google ADK, Zoho CRM, Agentic AI, Dynamic UI

PROJECTS

AI-Powered Renewable Energy Forecasting System

- Built **Next.js** web app for solar, wind & hydro forecasting with interactive graphs and **Groq AI** recommendations
- Developed **GRU + XGBoost ensemble** models with GridSearchCV on Open-Meteo & NITI Aayog data **R^2 = 0.7359**
- Integrated **MapBox** for **geospatial** location selection and **Recharts** for interactive forecast graphs and trends
- Deployed ML inference with **FastAPI** for scalable real-time prediction requests from the web app GitHub

QueryPilot — Agentic SQL Generation & Analytics

- Built **LangGraph** analytics agent with **Gemini** for natural-language to **SQL**, schema discovery & query correction
- Enforced **SQLGlot AST validation**, **PostgreSQL** privilege controls, query sanitization, and execution **guardrails**
- Implemented **human-in-the-loop approvals** using EXPLAIN cost analysis and bounded retries for query recovery
- Delivered **evidence-backed insights** and record visualizations with **99.05% accuracy** across **105 tests** GitHub

URL Management Service
GoFr SOC'25

- Built **GoFr** service for **URL shortening & tracking**, supporting aliases, expiration, versioning, rollback, QR generation
- Implemented **idempotent** link creation with **Redis** caching and resilient **MongoDB** fallback for redirects
- Developed **click analytics** with unique visitors, device/browser data, referrers, geolocation, and time-series tracking
- Secured APIs with **JWT + API-key** authentication and documented endpoints using **OpenAPI/Swagger**; GitHub

POSITION OF RESPONSIBILITY

Technical Contributor | Event Coordinator | SDG - COPS IIT BHU
July 2024 - Present

- Led Freshers' Orientation, workshops on **Git**, **programming** & **web dev**, and curated structured learning resources.
- Mentored students and evaluated projects during DebugIt COPS Week '25 and Summer of Code '25 in the web track.
- Contributed to club **open-source** projects: Multiplayer UNO game (**MERN**), COPS website(**React**), Institute Grievance Portal, and Digital Permission System.

Technical Associate | E-Cell IIT BHU
July 2024 - April 2025

- Built interactive **UIs** and **Apis** for the official website and Campus Ambassador Portal using **Next.js**.
- Integrated **dynamic forms** to improve user interaction and data handling with **Firebase**.
- Added **Framer Motion** animations and managed web updates for E-Summit'25 technical execution.

HONOURS AND ACHIEVEMENTS

- Secured ***2nd*** position in the **Hack It Out** hackathon at **Technex '25** (IIT BHU)
- **Semi-Finalist** at **Flipkart GRiD 8.0** (SDE Track)
- Selected among the **top 38** contributors from 109 proposals for **GoFr Summer of Code 2025**, Templates Track
- Solved **1000+** problems on Leetcode, GFG & Codechef; Max Ratings: **LeetCode Knight – 1880**, **CodeChef – 1473**
- Contributed **100+ Pull Requests** to diverse **open-source projects** on **GitHub**.
- Received the **Achievers Award** as **Science Stream Topper** in XII board (Sub-Topper: Chemistry & Maths).

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