Satyam Gupta

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Profile Summary

I'm a developer who thrives at the intersection of modern web technology and applied artificial intelligence. With a strong foundation in full-stack development using React, Node.js, and TypeScript, I build responsive, user-first web applications. Simultaneously, I design and implement AI systems—from creating smart content generators and archaeological prediction tools to developing OCR pipelines and signal processing models for IoT. I'm looking for remote opportunities to contribute my versatile skill set to a team building intelligent, impactful products.

Education

Jaypee Institute of Information Technology, Noida, India **June 2025**
Bachelor of Technology (B.Tech) – Computer Science and Engineering

Core Subjects: *Data Structures and Algorithms, Web Development, Database Management Systems, Operating Systems, Object-Oriented Programming, Computer Networks, Machine Learning, Software Engineering, Cloud Computing*

Delhi Public School, Ghaziabad, India **April 2021**
Senior Secondary (CBSE) – Science Stream (PCM)

Focused on Mathematics, Physics, and Computer Science with strong foundations in analytical reasoning and logical problem-solving.

Key Skills & Expertise

- Communication & Presentation
- Analytical Thinking
- Problem Solving
- Attention to Detail
- Team Collaboration
- Project Management
- Creativity & Design Thinking
- Adaptability & Time Management
- Technical Documentation
- Self-Learning & Initiative
- Agile & Scrum Methodologies
- Version Control (Git)

Frontend & UI/UX Development: React.js, Next.js, JavaScript (ES6+), TypeScript, HTML5, CSS3, Tailwind CSS, Material-UI, Ant Design, UX Patterns, Modals, Tooltips, Legends, Microinteractions, Utility-First Styling

Backend, APIs & State Management: Node.js, Express.js, REST APIs, Firebase Firestore, MongoDB, MySQL, Redux Toolkit, React Context API, LocalStorage, Firebase Sync

Programming & Scripting Languages: JavaScript, TypeScript, Python, C++, C, SQL

Performance & Optimization: React.memo, useMemo, Virtualization, Lazy Loading, Code Splitting, Efficient Rendering

Data Visualization & Media: Recharts, Custom SVGs, D3-like Charts, Gantt Views, WaveSurfer.js, Interactive Audio UI, Waveform Playback Tools

ML, Computer Vision & Embedded Concepts: OpenCV, pytesseract, NumPy, Isomap, LLE, OCR Pipelines, IoT-AI Integration, Smart Infrastructure (Ideation), Embedded Design

Tooling, Debugging & Foundations: Chrome/React DevTools, Postman (Advanced), WebSocket Inspection, VS Code, Git, GitHub, Jupyter Notebook, npm, DSA, OOP, OS, DBMS, Computer Networks

WORK EXPERIENCE

Software Engineer Intern – FullStack Development *Jun 2025 – Oct 2025*
ToolJet, India

- Built custom plugins for ToolJet Marketplace using TypeScript & Node.js, enabling seamless API integrations (e.g., GitHub, CRM) for low-code workflows.
- Designed schema-driven UIs via manifest.json and operations.json, allowing non-technical users to configure API connections without code.
- Optimized API query execution, implementing caching, error handling, and performance improvements for third-party services like GitHub (Octokit).
- Contributed to ToolJet CLI for plugin scaffolding and deployment, streamlining developer workflows.
- Empowered 1000+ users to integrate external APIs without coding through intuitive plugin-based solutions.

Junior Software Engineer Intern – Frontend Development *Jul 2024 – Jun 2025*
ORIserve, India

- Developed and maintained responsive UI components using **React.js, TypeScript, and Redux** for scalable web applications.
- Collaborated with product and backend teams to implement RESTful APIs, enhancing feature delivery and reducing integration bugs by 30%.
- Improved code performance by applying advanced optimization techniques such as React .memo, useMemo, and component virtualization.
- Integrated Ant Design and Material-UI to build accessible, mobile-first UI with consistent design patterns and reusable components.
- Contributed to **code reviews, CI/CD integration, and Git-based version control** in an Agile development workflow.

Backend Developer Intern *Centre for Railway Information Systems (CRIS), Delhi* *May 2024 – Jul 2024*

- Contributed to the development of scalable backend modules for internal railway systems using **Node.js** and **Express.js**.
- Integrated RESTful APIs for data exchange between services and optimized response times by 20%.
- Worked within an Agile team structure, collaborating with frontend and database teams to meet weekly sprint goals.

Frontend Developer Intern *Coincent, India* *Aug 2022 – Oct 2022*

- Built responsive web pages and interactive UI components using **HTML5, CSS3, and JavaScript** for an industry-level job portal.
- Integrated user-facing features such as dynamic forms, real-time job listings, and modal-based detail views.
- Participated in UI testing and bug fixes to enhance cross-browser compatibility and reduce bounce rate.

PROJECTS

FOODIE – Online Canteen Ordering Platform (MERN Stack)
github.com/satyy2301/FOODIE-Online_Ordering_system-

- Designed and deployed a full-stack online canteen solution using **MongoDB, Express.js, React.js, and Node.js (MERN)** to enable real-time contactless food ordering and payment.
- Implemented user authentication, cart system, and order status tracking to enhance usability and efficiency.
- Integrated **Firebase Firestore** for admin control and live updates, reducing operational wait time by 40%.
- Focused on UI/UX enhancements using Tailwind CSS and React Router for seamless navigation.

AIPoster – AI-Powered Content Generator & Auto-Tweeter (AI , Python, CSS)
github.com/satyy2301/AiPoster-

- Designed and deployed an automated system that fetches real-time news using **GNews API** and generates engaging Twitter posts with **Deepseek AI (OpenAI alternative**).
- Tech Stack: **FastAPI, Deepseek AI, GNews API, Tweepy (Twitter API), Python, SupaBase**
- Implemented keyword-based news filtering, AI summarization (280-character tweets), and auto-posting via **Twitter API** with error handling for rate limits.
- Integrated multi-API architecture (**news fetching + AI + social posting**) with 95% reliability using Python async workflows.

Poetik – AI-Powered Creative Writing And Learning Literature Platform (Next.js, React, TypeScript, OpenAI/LLM)
github.com/satyy2301/Poetik-

- Engineered a full-stack platform where users learn, write, and share poetry through three AI-guided pillars: **Read (annotated classics), Write (AI-assisted composition), and Learn (personalized feedback).**
- Built with **Next.js, React, TypeScript,** and **FastAPI,** integrating **OpenAI APIs** to generate, critique, and adapt poems based on style, structure, and emotion.
- Developed a **social learning dashboard** with user profiles, shared creations, real-time feedback, and progress tracking—blending education with community engagement.
- Designed with a **modular, extensible architecture** to support future features like voice narration, collaborative writing rooms, and multi-language poetic forms.

Archaeological RAG Chatbot – AI Assistant for Survey Analysis & Site Prediction (React,Python, LangChain, FAISS)
github.com/satyy2301/Archeological Rag Bot Assistant - e

- Engineered a **retrieval-augmented generation (RAG) chatbot** that analyzes archaeological documents, maps, and survey data to answer queries and predict potential excavation sites with AI-driven insights.
- Built using **Python**, **LangChain**, and **FAISS** vector storage, integrating geospatial libraries (**GeoPandas**, **Folium**) to visualize predicted site locations and contextual evidence layers on interactive maps.
- Designed a **streamlined data ingestion pipeline** that processes PDF reports, field notes, and satellite imagery, converting unstructured data into searchable, context-rich embeddings for accurate retrieval.

Local Mind LLM – Open-Source, Locally-Runnable LLM Interface (Python, PyTorch, Tkinter/Qt, React)
github.com/satyy2301/Local-Mind-LLM- e

- Developed a **desktop-native LLM interface** that enables offline interaction, fine-tuning, and experimentation with open-source models like Llama 3 and Mistral, **eliminating cloud dependency**.
- Built with **Python, PyTorch**, and a **custom Tkinter/Qt frontend**, featuring model loading, context-aware prompting, session management, and side-by-side output comparison.
- Implemented **model quantization and memory optimization** techniques to run billion-parameter models efficiently on consumer hardware while maintaining responsive inference speeds.

Localization in IoT using Dimensionality Reduction (Python)
github.com/satyy2301/Localization-in-Internet-of-Things e

- Developed an IoT-based indoor localization system using **Raspberry Pi, Arduino**, and **Python**.
- Applied dimensionality reduction techniques like **Isomap, LLE, and Laplacian Eigenmaps** for accurate pattern recognition and visualization with interactive dashboard using **Jupyter Notebook** to display signal strength maps and location accuracy.
- Enhanced real-time tracking accuracy by over 25% through optimized sensor calibration and signal processing.

AI-FlightTracker – Airline Market Analysis Dashboard (Python, Flask, JavaScript, Chart.js)
github.com/satyy2301/AI-FlightTracker- e

- Engineered a real-time flight analytics platform that scrapes, processes, and visualizes airline data—tracking pricing trends, demand shifts, and route performance using interactive dashboards and predictive models.
- Built with a modular Python backend and responsive frontend, enabling stakeholders to make data-driven decisions with live market insights and historical trend forecasting.

SnowBoarder – 2D Platformer Game in Unity (Unity, C#)
github.com/satyy2301/snowboarder-game e

- Developed a 2D side-scrolling platform game in **Unity** using **C**, featuring smooth player movement, jump physics, crash detection, and score tracking, improved FPS and memory usage by optimizing rendering and sprite animations.
- Added gameplay enhancements like particle effects, collision logic, and a restartable finish line mechanic.

Crop Production Aid – Decision Support Tool for Farmers (Python)
github.com/satyy2301/Crop-Production-Helper e

- Developed a decision-support system in **Python** using **Jupyter Notebook** to assist farmers with crop yield predictions.
- Integrated a **Decision Tree Analyzer** and used data visualizations for actionable insights. Focused on agricultural sustainability and data-driven planning for rural stakeholders.

ACHIEVEMENTS & CERTIFICATIONS

- Successfully deployed multiple full-stack web applications with real-time features and responsive UI, earning top feedback in peer reviews and demos.
- Developed and published 10+ open-source projects on GitHub with clean documentation and issue tracking.
- **React - The Complete Guide (Udemy)** – Covered components, state, props, routing, hooks, and performance optimization.
- **JavaScript Algorithms and Data Structures (freeCodeCamp)** – Mastered DSA concepts including recursion, sorting, and complexity analysis.
- **Introduction to Web Development (Coursera, University of California)** – Gained strong foundations in HTML, CSS, and JavaScript.