

# Gurjot Singh

+91 8728880866 | [gurjotsingh05@gmail.com](mailto:gurjotsingh05@gmail.com) | [LinkedIn](#) | [Leetcode](#) | [GitHub](#)

## EDUCATION

---

**Netaji Subhas University of Technology**  
*Bachelor of Technology in Electrical Engineering (CGPA: 8.4)*

New Delhi  
August 2020 – May 2024

## EXPERIENCE

---

**Software Development Engineer**  
*Shorthills AI*

Sep 2024 – Present  
Gurugram, Haryana

- **Multi-agent research pipeline for tax professionals using Google ADK**
  - \* Designed and implemented **multi-agent workflow** with iterative query breakdowns and multi-step retrievals, significantly improving context gathering and response quality.
  - \* Integrated **Azure Blob Storage** support in Google ADK ([PR](#)) and containerized the system using **Docker** for seamless deployment on **Azure AKS**.
- **Transaction Analyzer: Gen AI-powered GST Input Credit Analyzer**
  - \* Re-engineered the AI pipeline with **prompt caching** and async task orchestration, reducing LLM inference cost by **90%** while scaling to **900K transactions/month**.
  - \* Boosted transaction tagging accuracy from **87%** → **92%** by switching from standard RAG to **LightRAG** while maintaining the same cost. Contributed to **LightRAG's open-source codebase**, with **four** pull requests ([#553](#), [#585](#), [#686](#), [#750](#)) successfully merged to improve its functionality and performance.

**Software Engineering Intern**  
*Skillto*

June 2023 – July 2023  
Ludhiana, Punjab

- Significantly improved performance by re-coding the application using **Next.js**, **TypeScript**, and **Recoil**, resulting in up to **65%** shorter page load times.
- Enhanced visual appeal and usability through active participation in a website redesign project, utilizing **Figma** and **Adobe Illustrator** to refine design elements.

## PUBLICATIONS

---

**Comparative Analysis of Cluster-Specific Approach for Energy Management Using Meta-Heuristic Techniques**

April 2024

*Delhi Technological University, New Delhi*

[Link](#)

- Presented at the **IEEE Third International Conference on Power Electronics, Intelligent Control, and Energy Systems**, showcasing research on optimization techniques for residential electricity management. Highlighted **Grey Wolf Optimization's** superior performance over **Whale Optimization Algorithm** in cost minimization and convergence speed, along with effective peak-cost reduction using **K-means clustering**.

## PROJECTS

---

**Speedmaster** | *MongoDB, Express.js, React.js, Node.js, RapidAPI*

[Github](#)

- Built a **real-time multiplayer speed typing game** using WebSockets, achieving hackathon recognition for its responsive UI and seamless gameplay powered by the MERN stack.

**Blogging Website** | *TypeScript, Express.js, React.js, Node.js, PostgreSQL*

[Link](#)

- Developed a full-stack blogging platform with **JWT-based authentication** and **Cloudflare + Vercel deployment**, ensuring secure and efficient end-to-end performance.

## ADDITIONAL

---

**Technical Skills:** Python, C/C++, JavaScript, TypeScript, Node.js, React.js, Next.js, Socket.io, LangChain, RAG, LLMs, Hugging Face, Sentence Transformers, Vector DBs, Docker, Azure (AKS, Blob Storage), Redis, PostgreSQL, Git

**Achievements:** **Databricks Certified Data Analyst Associate**; secured **83rd rank** in the finale of Code Gladiators by TechGig (2023); among the **top 13 finalists** at Tally CodeBrewers (2023) hackathon with over **20,000 registrations**.

**Extra-Curricular:** Security head at Moksha(2023) overseeing the safety and well-being of over **100,000 attendees** at the cultural fest, Security Team lead at Resonanz(2022), the cultural fest of NSUT.