## Surbhi Sharma

Mathura, India +91 7417085101 ssurbhisharma139@gmail.com

<u>LinkedIn</u> | <u>GitHub</u>

**Date:** July 7, 2025

To

The Hiring Committee Tower Research Capital Gurgaon, India

Subject: Application for Core Engineering Intern Position

Dear Hiring Team,

I am writing to express my strong interest in the **Core Engineering Intern** position at **Tower Research Capital**, as advertised. As a Computer Science (Honors) undergraduate at GLA University (Ranked 2nd in class), with a deep foundation in data structures, backend systems, and DevOps practices, I am excited about the opportunity to contribute to your globally respected quantitative trading infrastructure.

During my internship at Meridian Solutions, I worked on a chatbot integrated with a Retrieval-Augmented Generation (RAG) pipeline, where I implemented NLP-driven query classification and modular backend logic in Python. Additionally, as an active open-source contributor, I developed reusable Python modules and CI/CD scripts for the AutoEDA project—demonstrating my ability to collaborate across distributed teams and work on performance-focused internal tooling.

My technical strengths include:

- Strong grasp of DSA, backed by 500+ LeetCode problems and academic excellence.
- Hands-on experience with Java, Python, SQL, and MongoDB, aligning well with your post-trade systems.
- Exposure to Linux-based systems, Shell scripting, and DevOps workflows (Docker, GitHub Actions, Jenkins).
- Project work including a simulated trade capture and P&L system using Java + MySQL, mirroring realworld middle-office operations.

What excites me about Tower is your culture of engineering rigor and innovation within a high-performance environment. I am eager to apply my systems mindset and learning agility to real-world trading infrastructure while growing under the mentorship of your exceptional engineering team.

Thank you for considering my application. I would be thrilled to further discuss how I can contribute to your team. I am available for interviews at your convenience and can relocate to Gurgaon as required.

Warm regards,

Surbhi Sharma