

# Harshit Singh

sharshit0369@gmail.com | +91 96432 74676 | Delhi, India  
LinkedIn | GitHub | Portfolio

## Summary

Full-stack developer with expertise in AI integration and MERN stack. Built multiple production systems using large language models (LLMs) and transformer architectures. Proven ability to deliver cost-effective solutions through optimized system design.

## Technical Skills

- **AI/ML:** Transformers, LLM Fine-Tuning, Qwen Models, PyTorch
- **Languages:** Python, JavaScript, HTML5/CSS3
- **Frontend:** React, Tailwind CSS, Responsive Design
- **Backend:** Node.js, Express.js, REST APIs
- **Databases:** MongoDB, Firebase, Atlas
- **Tools:** Git, Jupyter, WebSockets, Chrome DevTools

## Projects

### Spokify – AI English Tutor May 2025

*MERN Stack | Qwen-3 | MongoDB Atlas*

- Developed conversational AI using transformer models with 89% accuracy
- Designed custom API mediator using MongoDB reducing inference costs by 100%
- Implemented WebSocket communication for real-time feedback

### Startup Genie – Business Validator April 2025

*Qwen-3 | Node.js | MongoDB Atlas | Zero-Cost Architecture*

- Created AI analyzer processing 150+ queries with 92% satisfaction
- Integrated zero-cost architecture using free-tier cloud services
- Developed PDF report generator for business plans

### DPS Gurgaon Report Card System Jan 2023

*Python Automation | Multithreading | Web Scraping*

- Reverse-engineered school portal API using Chrome DevTools
- Reduced report retrieval time in v2 by 95% from 30min through parallel requests
- Saved Rs.20,000+ for classmates by bypassing official channels

## Education

### K.R. Mangalam University 2024–2028 (Exp.)

B.Tech in Computer Science & Engineering  
*Relevant Coursework:* Machine Learning, Neural Networks

### Delhi Public School, Gurgaon 2017–2023

CBSE Board

## Research

### Self-Verifying Language Models Ongoing

*PyTorch | HuggingFace*

- Developing architecture for error-detection in LLM outputs
- Testing feedback-loop systems with 3-layer verification
- Initial results show 35% improvement in factual consistency