

# Somya Agarwal

somyaagarwal0608@gmail.com | 8449919761 | LinkedIn | GitHub | LeetCode

## EDUCATION

<b>Vellore Institute of Technology, Bhopal</b>	2022 - 2026
Bachelor of Technology in Computer Science GPA - 8.60/10	
10 <sup>th</sup> Standard - 89.4%	
12 <sup>th</sup> Standard - 89.25%	

## WORK EXPERIENCE

<b>Machine learning Intern, Suvidha Foundation</b>	May 2025 – July 2025
• Engineered the design and implementation of custom pipeline integrating source analysis, credibility filtering, and BERT-based summarization models, which flagged over 500 unreliable news articles per day.	
• Achieved a +35% improvement in trust score and reduced fake news content in summaries by over 50% through rigorous evaluation.	
• Built a source analysis pipeline using credibility filtering and BERT based summarization models, decreasing the average summarization processing time by 15%, enabling faster content assessment.	
<b>Software Developer Intern, Deeporion Technology</b>	October 2024 – January 2025
• Developed a real-time sentiment analysis engine (AngularJS, Java, and MySQL), processing 25k+ customer reviews daily; reduced feedback loop by 40%.	
• Improved MongoDB and PostgreSQL queries across 10+ apps, reducing retrieval time by 35 seconds using optimized indexing and joins.	
• Collaborated with cross-functional teams to deliver backend services in an agile environment, demonstrating ownership and bias for action.	

## SKILLS AND EXPERTISE

<b>Languages</b>	: Python, JAVA, C, C++, HTML5, CSS3, JavaScript
<b>Databases</b>	: MySQL, PostgreSQL, SQLite, Oracle DB, MongoDB
<b>Cloud Technologies</b>	: AWS (Lambda, API Gateway, IAM, EC2, JavaScript SDK)
<b>Frameworks and Tools</b>	: GIT, REST, Spring Boot, Node.js, React.js, RESTful APIs
<b>CS Fundamentals</b>	: Data Structures, Algorithms, OOP, Operating Systems

## ACADEMIC PROJECTS

<b>CrisisWatch - AI-Powered Crisis Mapping Platform</b>	August 2025
• Designed a full-stack crisis mapping platform with <b>React, FastAPI, and PostgreSQL/POSTGIS</b> , enabling visualization of real-time disaster incidents with 1.5-3 seconds latency.	
• Implemented a robust <b>PostgreSQL + Alembic migration system</b> , ensuring 100% database schema version control and smooth CI/CD pipelines.	
<b>Carbon NFT Marketplace</b>	April 2025
• Structured a full-stack <b>decentralized marketplace</b> where users earn blockchain-based NFT badges for purchasing eco-friendly products, integrating sustainability with Web3.	
• Built and deployed <b>ERC-721 smart contracts</b> on the Polygon Testnet using Solidity and Hardhat, enabling secure NFT minting tied to carbon footprint reduction.	
<b>Crime-Dashboard – Crime Mapping and Analysis Platform for India</b>	November 2024
• Designed a web-based crime mapping platform for India using geospatial data visualization and interactive filters, leading to identification of 10 high-risk areas and informing resource allocation strategies for local law enforcement.	
• Enabled regional and type-based exploration with 3000+ user interactions, demonstrated real-world public safety use case.	

## CERTIFICATIONS

• Full Stack Development from Apna college   Coursera Frontend verified from John Hopkin's University
• GEN AI (IBM)   Java Developer Professional (OCP)

## ACHIEVEMENTS

<b>Smart India Hackathon</b>
• Led team of 4 in developing a prototype ranked in top 5 out of 200 submissions; contributed to backend and ML modules.
<b>HackOnBlocks</b>
• Directed a standout prototype ranked as one of the top 5 projects out of 150+ teams, demonstrating strong designs and execution.