

SHIVANG GULATI

Final Year Undergraduate

(+91) 8224947361 | shivanggulati817@gmail.com | <https://www.linkedin.com/in/shivanggulati810/> | Manipal, Karnataka

Professional Summary:

Aspiring Software Engineer and Pre-Final Year Computer Science undergraduate with hands-on experience in full-stack development, AI integration, and embedded systems. Passionate about building scalable tech solutions using Python, Swift, Django, and React. Passionate about translating complex problems into intuitive digital products.

Education:

Manipal Institute of Technology

Expected Graduation: June 2026

Bachelor of Technology (B.Tech.), Computer Science and Engineering

CGPA: 8.15

Experience:

- **Research Intern – Part Time (Manipal Institute of Technology, Manipal)**
2023 - Present
 - Analyzed traditional and advanced ML/DL for predicting NVIDIA stock prices using statistical metrics.
 - Gained practical insights into model credibility, robustness, and financial forecasting reliability.
- **Cybersecurity Analyst Intern – Full Time (Indian Institute of Industrial Technology, Design and Manufacturing, Jabalpur)**
May – July 2025
 - Conducted dynamic analysis of malware in ELF files to understand runtime behavior and detect malicious patterns in IoT environments. Enhanced my expertise in malware behavior profiling and real-time threat detection for embedded systems.
 - Developing a model to analyze and classify ELF-based malware in real time on IoT devices using dynamic feature extraction. This work deepened my understanding of secure embedded systems and the challenges of on-device malware detection.

Technical Skills:

Programming Languages: C, Swift UI, Python, Verilog, ARM assembly language, SQL, HTML, CSS, Bash scripting, JavaScript, CUDA C

Libraries & Frameworks: OpenCV, NumPy, Pandas, TensorFlow, Keras, Matplotlib, Seaborn, Django, React.js

Development Tools & Skills: iOS app development, Google SDK, Git, GitHub, Prompt engineering, LLM integration

Cloud & DevOps: Firebase, GitHub Actions

Databases: MySQL, SQL schema design

Operating Systems: Windows, Linux, macOS

IDEs & Editors: Visual Studio Code, Xcode, IntelliJ IDEA, Code::Blocks

Soft Skills: Teamwork, problem solving, innovation, communication, adaptability, agile collaboration, public speaking

Projects:

- **RiPlay - iOS App (2024-Present) {iOS Development — Swift, SwiftUI, XCode}:**
 - Developed a white-noise app to help toddlers sleep better, using SwiftUI for an intuitive UI and Firebase for crash analytics. Completed internal testing and learned mobile UX and deployment strategies to improve future user engagement by ~20%.
 - Designed an interactive interface with real-time sound controls and visuals, optimized for iOS compatibility and App Store standards. Applied iterative testing to ensure usability and gained strong experience in user-focused product development.
- **InkFluence AI – AI Blogging Platform (2025) {Full-Stack Project — Django, React.js, SQLite, LLaMA 3.1}:**
 - Built a full-stack blogging platform using Django and LLaMA 3.1 to enhance writing efficiency through AI-driven grammar correction, content generation, and summarization. Reduced content drafting time by ~40% and improved writing accuracy by 30%.

- Integrated NLP pipelines into a scalable backend with a rich text editor and real-time suggestions, gaining experience in deploying LLMs and optimizing content workflows for user productivity.
- **Smart Traffic Light System (2024) {Verilog}:**
 - Developed a smart traffic light system using Verilog to dynamically control signal timings and reduce congestion at urban intersections, boosting simulated traffic throughput by 40%.
 - Designed and tested logic on SUMO simulation software, gaining strong proficiency in circuit design and traffic flow optimization techniques.
- **Time Management App (2023) {Java, JavaFX}:**
 - Created a desktop-based scheduling app with priority settings and reminder alerts using JavaFX, helping users better organize tasks and significantly improve productivity.
 - Built a robust backend and responsive UI, enhancing user experience while deepening hands-on skills in Java logic structuring and interface design.
- **Smart Plant Watering System (2024) {Python, Embedded C, Arduino}: [GitHub](#)**
 - Developed an automated irrigation system using machine learning and sensors on Arduino, enabling predictive watering and reducing water wastage by up to 45%.
 - Deployed a logistic regression model on embedded hardware, gaining practical experience in ML integration, sensor calibration, and real-time system control.
- **Hey Taxi (2024) {SQL, Database Design}: [GitHub](#)**
 - Designed and implemented a backend system with structured schemas for users, drivers, rides, and payments, enabling efficient and scalable taxi service operations.
 - Focused on relational database optimization and query performance, strengthening SQL expertise and backend data handling capabilities.
- **Bluebird Hotel Management System (2024) {Python, MySQL, PHP}: [GitHub](#)**
 - Developed a web-based hotel management platform featuring secure user/staff logins, booking functionality, and an integrated AI chatbot to streamline guest and admin operations.
 - Centralized hotel data workflows and booking analytics, while gaining hands-on experience in full-stack development and system integration.

Certifications and Courses:

- Python and Artificial Intelligence – Microsoft Learn Student Ambassador & Google Developer Student Clubs (KIIT via DevTown)
- Python – Robothlon Workshop at Rendezvous 2019, IIT Delhi
- AI for Everyone – DeepLearning.AI via Coursera
- Blockchain and Cryptocurrency Explained – University of Michigan via Coursera
- Introduction to the Internet of Things and Embedded Systems – UC Irvine via Coursera
- What is Data Science? – IBM via Coursera
- Beginner SEO with Semrush
- Google Data Analytics Professional Certificate via Coursera having 9 modules:
 - Foundations: Data, Data, Everywhere
 - Ask Questions to Make Data-Driven Decisions
 - Prepare Data for Exploration
 - Process Data from Dirty to Clean
 - Analyze Data to Answer Questions
 - Share Data Through the Art of Visualization
 - Data Analysis with R Programming
 - Google Data Analytics Capstone: Complete a Case Study
 - Accelerate Your Job Search with AI