

# Nishant Verma

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LinkedIn — GitHub — Portfolio

## Education

• <b>Indian Institute of Technology, Bhilai</b>	B.Tech in Data Science and Artificial Intelligence	Oct 2022 - Present
• <b>Seventh Day Adventist Senior Secondary School, Lucknow</b>	High School Intermediate School	April 2018 - March 2019 April 2020 - March 2021

## Experience

• <b>VPN Performance Automation</b>	May 2025 - June 2025 — IIT Bombay
– Automated the usage of commercial VPN applications on Windows using AutoHotKey scripts and UI Automation (UIA) for GUI interaction, enabling hands-free testing workflows.	
– Designed automation flows for tasks like connection setup, running performance scripts, and disconnection.	
– Collected runtime metrics (latency, throughput, speed, and logs) for analysis.	
– Streamlined VPN testing operations to improve reliability, repeatability, and performance efficiency.	
• <b>Project Intern</b>	May 2025 - June 2025 — IIT Bhilai & C-DAC India
– Modified the official StrongSwan Android VPN client to support Pre-Shared Key (PSK) authentication.	
– Performed testing and validation of PKCS#11 functions for the TrusToken project, ensuring secure cryptographic operations.	
• <b>Software Development Intern</b>	May 2024 - June 2024 — IIT Bhilai
– Engineered a Flutter-based attendance application for over 800 students.	
– Integrated a indigenously developed USB token for secure login and data capture from the ID card.	
– Utilized NFC technology and NDK for seamless interaction with the USB token.	

## Projects

• <b>CodePilot (VS Code Extension)</b> [GitHub]	
– Developed with TypeScript, HTML, CSS; enabled coding help via Ollama (local LLM).	
– Created an intuitive interface to boost developer efficiency in VS Code.	
– Ensured privacy and performance via local AI execution.	
• <b>NPM Package: Text Editor</b> [GitHub]	
– Developed a pre-configured text editor based on the TipTap editor.	
– Implemented core functionalities using TypeScript and customized the layout with CSS.	
• <b>Agentic RAG with Pathway (InterIIT 13 HP3)</b> [GitHub]	
– Built a web-based AI assistant supporting chat and voice queries.	
– Backend: Flask + Socket.IO for document retrieval, file parsing, and live responses.	
– Frontend: React + markdown support + speech-to-text interaction.	
• <b>SAR Image Colorization</b> [GitHub]	
– Implemented a research paper on SAR Image Colorization for the ML project.	
– Developed the whole architecture and trained the model on 6000+ images.	
– Achieved high scores on PSNR and SSIM metrics.	
• <b>Quiz App in Flutter</b> GitHub Link	
– Developed a comprehensive quiz app using Flutter, Node.js, and a React.js admin panel.	
– Included subject-wise, JEE, and NEET-based tests with time-bound limits.	
– Integrated Google OAuth and AWS for authentication and storage.	
• <b>Retrieval Augmented Generation using LLM</b> [GitHub]	
– Built a document chat interface using HuggingFace API, LangChain, and Streamlit in Python.	
– Allowed users to chat with uploaded documents or web pages.	

## Skills

• <b>Languages:</b> JavaScript, TypeScript, C, Python, Dart
• <b>Tools/Technologies:</b> HTML, CSS, React.js, Node.js, Express.js, Tailwind, Android Studio, AWS, HuggingFace, LangChain, Scikit-learn, Flutter, GCP, Firebase, Git, GitHub
• <b>Databases:</b> MongoDB, MySQL
• <b>Others:</b> Communication, Problem-Solving, Debugging, Teamwork

## Certifications

- Completed Basics of Ethical Hacking Course on Udemy