# Rohit Sharma

LinkedIn:linkedin.com/in/rohit-sharma-904972266
Github: github.com/23f002473

Email: rohitshrama890@gmail.com
Mobile: +91-7018406133

## ABOUT

Innovative Machine Learning Engineer with expertise in algorithm design, model optimization, and data preprocessing. Skilled in multiple languages and ML frameworks to deliver scalable solutions.

## EXPERIENCE

- **Summer Intern** — June 2025 – July 2025
  *Indian Institute of Technology, Mandi(H.P)*
  - **VLMaps Research**: Contributed to research on VLMaps — a unified embedding space for Visual-Language Navigation (VLN), enhancing cross-modal understanding and improving navigation success rates by 18% in simulated environments.
  - **Unified Embedding Optimization**: Developed and fine-tuned a shared embedding space integrating vision and language features, achieving a 12% increase in cross-modal retrieval accuracy.
  - **VLN Pipeline Enhancement**: Integrated VLMaps into existing VLN frameworks, reducing navigation planning latency by 22% and improving generalization to unseen environments by 15%.

- **ML & AI Intern** — June 2024 – July 2024
  *Ingenx Technology Pvt. Ltd, Gurugram(H.R)*
  - **AutoML Application**: Designed and implemented an AutoML regression application to automate model selection and hyperparameter tuning, improving prediction accuracy by 15% and user engagement by 30%.
  - **SAP AI Integration**: Explored SAP AI capabilities to develop intelligent applications, delivering a prototype that reduced process time by 20%.
  - **Chatbot Development with OpenAI**: Developed a chatbot using OpenAI and Chainlit models, increasing user satisfaction by 25% and reducing response time by 50%.

## EDUCATION

- **JawaharLal Nehru Govt. Eng. College** — Sundernagar, India
  *BTech in Computer Science (AI & ML) - CGPA: 7.67* — 2022 – 2026
  - **Key Courses**: Data Structures, Machine Learning, Artificial Intelligence, Computer Vision

- **Indian Institute of Technology, Madras** — India
  *BS in Data Science and Applications(Diploma level) - CGPA: 7.00* — 2023 – 2027
  - **Key Courses**: Business Data Management, Machine Learning, Tools for Data Science, DBMS

## TECHNICAL SKILLS

- **Languages**: Python, C++, SQL, Java
- **Frameworks**: TensorFlow, PyTorch, Keras, Flask, Streamlit, Langchain, Langgraph
- **Tools**: Git, Docker, VS Code, Jupyter Notebook, N8N
- **Soft Skills**: Problem Solving, Teamwork, Time Management, Communication

## PROJECTS

- **VisionAssist: AI-Powered Assistive Vision for the Visually Impaired (Computer Vision, A.I)**: Developed an AI-powered assistive vision system achieving 94.2% object detection accuracy and 89.7% OCR text recognition rate with real-time processing at 30+ FPS. Implemented visual language navigation with text-to-speech functionality and grid-mesh spatial mapping, improving user navigation efficiency by 78% in testing scenarios. Tech: YOLOv8, LangChain, OCR, VLN, N8N (2025)

- **QWACH: Detecting Malicious QR Code & URLs Using AI (Cybersecurity, Machine Learning)**: Developed an AI-powered hybrid stacking model to detect malicious QR code URLs, achieving 91.30% accuracy on a real-world dataset. Deployed a Chrome extension enabling real-time detection with over 1,000 QR's and URL's scanned in testing. Tech: Scikit-learn, MLP, Random Forest, Stacking Logistic Regression, KNN (2025)

- **Plant Disease Recognition System with AI-Powered Plant Doctor Assistant (Image Recognition, Machine Learning)**: Built a plant disease classifier achieving 91 to 94% accuracy across 38 classes. Integrated a chatbot assistant used by users for real-time diagnosis and treatment suggestions. Tech: TensorFlow, OpenCV, Streamlit,Pillow (2024)

## PUBLICATIONS

**Paper:HybridStack-MLP: Advanced Ensemble Learning for Malicious QR Code and URL Detection**: AI-Powered Hybrid Stacking Model achieved an impressive 91.30% accuracy in detecting malicious QR codes and phishing URLs, demonstrating the potential of ensemble learning in cybersecurity. (2025)

## HONORS AND AWARDS

- **State Level Smart Hackathon** — 2025
  *Secured 1st position at SLSH Hackathon Himachal Pradesh presenting Vision Assist.*
- **Smart India Hackathon** — 2025
  *Secured 1st position twice in college-level SIH competition.*

## VOLUNTEER EXPERIENCE

- **Event Organizer for Drama in Fest, JNGEC** — Himachal Pradesh, India
  *Coordinated drama events during college fest, organizing rehearsals & overseeing event logistics.* — 2023-2025
- **Coding Club Vice President at CSE Student Clubs, JNGEC** — Himachal Pradesh, India
  *Led a team to organize the coding events, hackathons and coding challenges, impacting students.* — Jan 2024 - Present