

SUMMARY

Final year B. Tech Computer Science and Engineering student with expertise in AI/ML, software development, and fintech applications. Proficient in developing data-driven, automated solutions that improve efficiency and user engagement, with practical experience in Retrieval-Augmented Generation (RAG), Large Language Models (LLM), and database management. Demonstrated ability to leverage programming languages like Python, Java, and SQL through hands-on projects and an internship as an SDE intern. Adept at leading teams and managing projects, with a focus on innovative fintech and healthcare solutions.

TECHNICAL SKILLS

Programming Languages	Java (Advanced), Python (Advanced), C++ & C (Intermediate), SQL (Intermediate)
AI & ML Technologies	LLM Stack: LangChain, RAG, LLMOps, Vector DB Deep Learning: CNN, ANN, ML Pipelining
Web Development	HTML5, CSS3, JavaScript
Tools & Frameworks	TensorFlow, Keras, Scikit-Learn, RASA, Streamlit, Tableau, Flask
Databases	MongoDB, MySQL, Oracle, Vector Stores
Version Control	Git, GitHub

EDUCATION

Qualification	Year	Educational Institution	CGPA/Percentage
B. Tech (CSE)	2021-2025	Vellore Institute of Technology, Vellore	CGPA: 8.65
Class XII (CBSE)	2021	Doon International School, Dehradun	Percentage: 84%
Class X (CBSE)	2019	Doon International School, Kanpur	Percentage: 95%

EXPERIENCE

Logic Information Systems, Bengaluru	Software Development Engineer Intern	(May 2024 – Jun 2024)
	▪ Designed and implemented an automated data retrieval pipeline leveraging Retrieval-Augmented Generation (RAG) for context injection, effectively generating Text-to-SQL queries using LLM.	
	▪ Enhanced user experience by integrating pipeline into RASA-based chatbot, automating domain-specific data retrieval and database interactions, resulting in 50% faster query processing and eliminating manual DDL execution.	
	▪ Tech Stack: Python, Langchain, RAG, LLMOOPs, Generative AI, Vector Stores, JavaScript, RASA	
	▪ Certificate: Link	

PROJECTS

ChatPDF	<ul style="list-style-type: none">▪ Description: Developed an innovative document analysis platform that leverages RAG and LLMs to enable natural language interactions with PDF documents, revolutionizing document comprehension and information retrieval efficiency.▪ Architected and deployed a RAG-based document intelligence system processing 100+ page PDFs.▪ Implemented chunk optimization and vector similarity search, reducing response time and integrated custom prompt engineering techniques, achieving 50% higher user satisfaction.▪ Tech Stack: Python, Langchain, LLM, LLMOOPs, RAG, Vector DB, HTML5, CSS3, Streamlit▪ GitHub: Link
Emotional Insight	<ul style="list-style-type: none">▪ Description: Created a real-time emotion recognition platform for educators to analyze student engagement and enhance learning experiences.▪ Engineered CNN model with 92% accuracy in detecting 7 distinct emotions.▪ Tech Stack: Python, TensorFlow, Keras, OpenCV, Flask, Keras, CNN, HTML5, CSS3, Streamlit▪ GitHub: Link
Nail Wise	<ul style="list-style-type: none">▪ Description: Created an innovative healthcare application that leverages deep learning for nail disease diagnosis, providing medical professionals with rapid, accurate disease detection and comprehensive treatment insights.▪ Developed detection system with 88% accuracy across 4000+ nail images and reduced diagnosis time from 15 to 4 minutes through automated analysis▪ Tech Stack: Python, TensorFlow, CNN, Flask, Keras, HTML5, CSS3 & JavaScript▪ GitHub: Link

CERTIFICATIONS		
AI & ML	Artificial Intelligence and Machine Learning Powered by Google Developers- SmartBridge, India	(Link)
Mern Stack	MERN Full Stack- Ethnus, India	(Link)
MathWorks AI & ML	Get Started with Artificial Intelligence- MathWorks (Virtual Internship Program)	(Link)

KEY COURSES TAKEN
Data Structures and Algorithm, Database Management Systems, Operating Systems, Computer Networks and Security, Cloud Computing, Cyber Security, Artificial Intelligence, Information Security, Data Science, Cryptography and Network Security and Software Engineering

LEADERSHIP & EXTRACURRICULARS		
Responsibilities	Events Head, IEEE TEMS Student Chapter, VIT Vellore <div><ul style="list-style-type: none">Led the planning and execution of various technical and non-technical events, increasing chapter participation and fostering a collaborative learning environment.Organized and coordinated workshops and seminars, driving community engagement and enhancing technical skill-building for members.</div>	2023 - Present
	Senior Core, Apple’s Developer Group, Student Club, VIT Vellore <div><ul style="list-style-type: none">Actively participated in and conducted workshops and technical events, fostering a collaborative environment and promoting app development best practices.</div>	2023 - 2024
Research	<div><ul style="list-style-type: none">Conducting research on radon emission from flooring and environmental sources.Proposed the addition of two specialized filters to modern air filtration systems, enhancing indoor air quality and reducing pollutant exposure to reduce radon, its decay products, and other harmful gases emitted by building materials like tiles in household environments.Research paper accepted for patent filing and review by faculty advisor.</div>	

ADDITIONAL INFORMATION	
Hobbies	<ul style="list-style-type: none">Emerging Technologies: Actively exploring and learning about new tech trends and advancements to stay ahead in the field.Travel: Passionate about visiting new destinations to experience diverse cultures and histories.Sports: Engaged in playing cricket, football, and tennis, fostering teamwork and discipline.
LeetCode	<ul style="list-style-type: none">Profile: leetcode.com/u/Harshpandey_25/Passionate about solving challenging problems on LeetCode to continuously improve my Data Structures and Algorithms skills.