Omni Manwani

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Education

Indian Institute of Information Technology, Vadodara-ICD 2022-2026
Bachelor of Technology in Computer Science and Engineering *CPI: 9.09*

- **Relevant Coursework:**
  Data Structures, Design and Analysis of Algorithms, Object Oriented Principles and Design(OOPs), Software Engineering, Database Management System, Computer Networks, Operating System, Artificial Intelligence

Skills and Tools

Technical Skills: C++, C, Python, SQL, NoSQL, Pandas, Matplotlib, Numpy, Seaborn, Scikit-learn, OpenSSL, spaCy
Tools: Git, VS Code, GCP, Google Collab, Jupyter Notebook, Latex , MS Office, Apache Server, AWS, Langchain, Neo4j
Soft Skills: Communication, Collaboration, Problem Solving, Critical Thinking, Adaptability, Leadership, Time Management

Projects

SecureVoteX | *C++, OpenSSL, Apache Server, SSL/TLS, RSA, SHA-256*
- Designed a secure three-tier electronic voting system architecture with distinct devices as certification authority, server, and client. Utilized OpenSSL for encrypted communication, to ensure private key management and certificate validation to prevent vote tampering and double voting. Applied El Gamal encryption for anonymous vote storage, voter privacy, and to public visibility of the vote count.

Medical Chat Bot ⧉ | *Python, LangChain, GPT-4, Med-Prompt,*
- Developed GPT-4 medical chatbot with LangChain and Med-Prompt for enhanced patient care, applied fine-tuning and prompt engineering for optimized responses, used ConversationBufferWindowMemory for context-awareness and Byte Pair Encoding for efficient tokenization.

Data Analysis using Python ⧉ | *Python, MySQL, Pandas, Matplotlib*
- Integrated real-time Walmart Sales CSV data using Pandas, queried and updated data trends via advance queries(Triggers, Views, Checks) in MySQL, visualized with Matplotlib, and implemented user-driven queries for flexible data analysis and reporting.

Wake-On-LAN Automation System | *C++, Socket Programming, TCP/IP Protocols, HTML, CSS, JavaScript*
- Developed network application using Winsock API for Wake-on-LAN over IP, httplib for efficient HTTP server development, and socket programming for packet transmission with POST/GET handling and employed C++ exception handling for robust socket operations.

Experience

Silicon Valley Health-Tech Start-up ⧉ | *AI Developer Intern, Remote* June 2024 – August 2024
- Developed chatbot using RAG (prevents hallucinations), LLM (Generates responses), LangChain (Chains prompts) and in-shot learning, used few-shot learning to improve accuracy.
- Generated Medical SOAP notes with doc-patient conversations, Whisper to transcribe and GPT-4 (information fetching), Claude (Prompt analysis), and Gemini (Rephrase and structure) models combined for better SOAP notes.

Leadership

VAMMAM | *Host, IIITV-ICD* August 2024
- Served as an Anchor and Student Host for VAMMAM Research Conference on Stealth Technologies, facilitating discussions and presentations on cutting-edge defense innovations.

Women-in-Tech, GDSC | *Member, IIITV-ICD* 2023-Present
- Organized workshops, awareness programs, and collaborated with industry experts to mentor students. Advocated for CSE education, offering strategic insights, roadmaps, and fostering opportunities for tech community.

Cultural Committee | *Member, IIITV-ICD* Jan 2023-June 2024
- Led Cultural Fest and coordinated cultural events. Managed committee's initiatives.

G-20 Summit, India ⧉ | *Exhibition Host —IIITV-ICD* May 2023
- Led educational initiatives for locals on G20's purpose and functions, while engaging with international delegates to deepen understanding of global economic cooperation.

Certifications and Achievements

NetElixir Hackathon| *NSGA-II, Multi-Objective optimization* ⧉ August 2024
450+ Questions on Leetcode ⧉ August 2024
Goldman Sachs Software Engineering Virtual Experience Program—Forage ⧉ June 2024
Google Cloud Computing Foundations ⧉ Oct 2023
Fundamentals of Deep Learning, NVIDIA ⧉ August 2023