HRIDYANSH SHARMA

Software Developer • Bhilwara, Rajasthan

📞 +91 9024266007 ✉ sharmahridyansh3@gmail.com 💼 LinkedIn/in/hridyansh ⌂ GitHub/ridh1234 🌐 Portfolio

Education

Indian Institute of Information Technology Vadodara - Diu Campus **Aug 2022 – May 2026**
Bachelor of Technology in Computer Science and Engineering *Diu, India*

Work Experience

Farnodes **May 2025 – Jul 2025**
Artificial Intelligence Intern *Remote*

- Architected **AgentXN**, offline agentic AI system with 92% accuracy across 9 modular MCP servers including Smart Calendar, To-Do Management, Notifications, and File Processing with JSON-based intent parsing and FastAPI backend.
- Designed multi-tiered memory architecture with custom RAG pipeline using LangChain and ChromaDB, achieving 40% hallucination reduction via vector-based similarity search and personalized contextual retrieval.
- Enhanced Gemma-1B model with prompt engineering for concurrent task threads; developed responsive React frontend for chat, memory management, and agent control with 60% response time improvement.

Projects

AgentXN: Offline Personal Task Assistant | Python, FastAPI, LangChain, ChromaDB | ⌂ Code **Jul 2025**

- Built offline AI assistant powered by fine-tuned 1B LLM, managing 9+ functional modules with 92% accuracy on multi-step commands with vector database integration for contextual memory.
- Integrated LangChain-based RAG pipeline with ChromaDB for contextual retrieval, improving accuracy by 40% through semantic search and conversation history management.

Sentiant AI: Full-Stack Sentiment Intelligence Platform | React, FastAPI, Mistral, BERT | 🔗 Live Link **May 2025**

- Architected full-stack application integrating YouTube and Reddit APIs with JWT authentication and sentiment analysis featuring natural language summarization capabilities.
- Deployed BERT for 94% accuracy classification and Mistral-7B for summarization, enabling contextual multi-source insights with 3-second average response time.

Neural Text-to-Speech System | PyTorch, CUDA, Tacotron2, HiFi-GAN | 🔗 Live Link **Mar 2025**

- Constructed Tacotron2 + HiFi-GAN neural pipeline achieving 4.2/5 MOS score; deployed interactive demo on HuggingFace Spaces with real-time audio synthesis capabilities.
- Accelerated inference through CUDA-based batching and data augmentation, reducing latency by 45% (from 2.1s to 1.15s) for real-time speech generation.

Document Layout Understanding System | Detectron2, OpenCV, spaCy | ⌂ Code **Oct 2024**

- Achieved 82.6% mAP on 15,000+ document images using Mask R-CNN with aggressive data augmentation for document structure recognition across 12 layout categories.
- Built OCR+NLP pipeline with Tesseract and spaCy, attaining 96.5% text accuracy and 0.89 F1-score for structural tagging with automated preprocessing workflow.

Technical Skills

- **Programming Languages:** Python (NumPy, Pandas, Scikit-learn), JavaScript, C++, Java, SQL
- **Machine Learning & AI:** PyTorch, TensorFlow, LangChain
- **Web Development:** React.js, FastAPI, HTML5, CSS3, RESTful APIs, JSON
- **Tools & Databases:** Git, GitHub, VS Code, Google Colab, Jupyter, MySQL, MongoDB, ChromaDB

Achievements

- Secured **2nd place** in Code-Voyage competition, Outperformed 300+ participants, achieving 2nd place out of 50 finalists.
- Achieved top percentile rankings: **LeetCode 1900+ rating** with 300+ problems solved [Profile] and **3-Star CodeChef rating** (1795 points) with 100+ DSA challenges [Profile].
- Completed **NVIDIA Deep Learning Institute Certification** in neural networks with 95% assessment score [Certificate].