

EDUCATION

S.R.M Institute of Science and Technology

B.Tech in Computer Science and Engineering; **CGPA: 9.23**

Coursework: Data Structures and Algorithms, ML Mathematics, Artificial Intelligence, Database Systems, NLP

Chennai, TN, India

Sept 2020 – Jun 2024

SKILLS

- **Languages:** Python, React, Tailwind CSS, SQL, Js, Typescript, Postgres, PyTorch.
- **Technologies:** Google Cloud Platform, Microsoft Azure, Docker, Open AI Playground, Hugging Face.
- **Research Areas:** Machine Learning, LLMs, Deep Learning, Generative AI, Diffusion models.

EXPERIENCE

Unremot

AI Engineer

Remote, IN

Feb 2024 – Jan 2025

- Developed AI-bots and Co-pilots for **The Wadhvani Foundation**’s Ed-Tech platforms and collaborated in creating, training, and testing two AI Ed-Tech platforms tailored for student entrepreneurs and SME business owners.
- Designed advanced prompting strategies, including **COT, TOT, ReAct, Reflexion, Self-consistency** and **multi-agent** methods, improving system robustness and preventing prompt hacking almost 95%.

SOUL AI

AI Prompt Engineer

Remote, IN

Sept 2023 – Jan 2024

- Trained a LLM using Reinforcement Learning (**RLHF**), achieving **over 93%** accuracy in user responses.
- Applied expertise in Computer Science and Mathematics, to develop an AI tutor optimized for educational applications.

PROJECTS

- Unified Research Assistant | React, TypeScript, Node.js, Tailwind CSS

• Built a collaborative research papers platform using **Llama 3.1** and **LangChain** with Supabase integration.

• Introduced **Arxiv** and **Semantic Scholar** APIs for paper search using AI semantic search.
- Tenant Management System | Firebase, Cloud Firestore, HTML, CSS, JS

• Developed a full-stack web app system with secure logins and automated tenant management logic.

• Integrated real-time data storage using **Firebase Authentication** and **Cloud Firestore**.
- 3D Generation using Vision Transformers | Python, PyTorch, DINO-V2, Diffusers

• Built a **ViT**-based pipeline for high-fidelity 3D texture generation from multi-view 2D images.

• Used **NeRF** for volumetric reconstruction and trained on **Objaverse** dataset of 100k 3D objects.
- Dynamic AI Gaming with LLMs | LLMs, RAG, Vector Databases, Node.js

• Created a real-time NPC dialogue generation using **LLMs** with low-latency inference pipeline.

• Integrated RAG with **vector database** for context-aware quest generation and adaptive gameplay logic.
- Optimized Image Generation Pipeline | PyTorch, Diffusion Models, SDXL, Whisper V2 Large

• Developed an optimized image generation pipeline for **low latency** and **reduced memory footprint**.

• Used **float16 inference**, **FlashAttention**, and accelerated samplers to acheive 60% faster and detailed results.

THESIS & PUBLICATIONS

Type Sculpt: Text-to-3D Generation with Personalised Precision using Adaptive Attention Mechanism

IRCTSD’24 (Best Paper Award), Published in Springer Nature

Synergizing Creativity and Code: A Quantum Leap in Game Development through Conversational AI

EXTRACURRICULARS

- Machine Learning Specialization: Coursera, 2024
- ML-Ops Specialization: Duke University, 2024
- Azure AI-900: Microsoft, 2024
- Reinforcement Learning: Hugging Face, 2023
- Speaker: Led a team and delivered seminars on **AI, ML, and LLMs to high-school students**.
- Leadership: Headed **WHHC** and **ACE** club events and coordinated **DI Club** initiatives at SRM University.