# Pragadeesh KMS

# LinkedIn | Portfolio

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#### **OBJECTIVE**

Dedicated and ambitious student with a strong focus on **diffusion models** and **advanced language models**, driven by a passion for generative AI. Experienced in designing impactful applications and contributing meaningful research. Eager to advance AI through rigorous academic exploration and collaborative innovation under esteemed faculty mentorship.

# **EDUCATION**

# S.R.M Institute of Science and Technology

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

Chennai, TN, India Sept 2020 – Jun 2024

Coursework: Data Structures and Algorithms, Operating Systems, Artificial Intelligence, Database Systems, Computer Architecture, Compiler Design, Linear Algebra, Statistics, and Calculus.

# SKILLS

- Programming & Frameworks: Python, SQL, C++, Rust, TensorFlow, PyTorch, Keras, Transformers, Diffusers.
- Technologies: Google Cloud Platform, Microsoft Azure, Docker, Open AI Playground, Hugging Face.
- Research Areas: Machine Learning, NLP, Deep Learning, Generative AI, 3D Geometry.

#### **PROJECTS**

- Text-to-3D Generation Using Vision Transformers: Developed a ViT-based system to generate 3D models from a single 2D image, ensuring texture accuracy while minimizing computational overhead and latency.
- Vision Guard: Engineered a real-time Personalized Content Moderation tool using RT-DETR, CLIP, and SAM-2 to detect and blackout screen content based on user-defined keywords, enabling content control and enhanced focus.
- Dynamic AI Gaming with LLMs: Created a gaming framework integrating LLMs and RAG to design adaptive and intelligent NPCs, enhancing player interaction and dynamic storytelling.
- Speech-to-Image with Advanced Prompting: Implemented a multilingual system using Whisper and Diffusers to convert speech into images with low latency and high accuracy through advanced prompting techniques.

# Thesis & Publications

- Type Sculpt: Text-to-3D Generation with Personalised Precision using Adaptive Attention Mechanism: IRCCTSD'24 (Best Paper Award), Selected for inclusion in Springer Nature Proceedings (Forthcoming)
- Synergizing Creativity and Code: A Quantum Leap in Game Development through Conversational AI:

### EXPERIENCE

Unremot

Remote, IN

AI Prompt Engineer

Feb 2024 – Present

- Developed AI-bots and Co-pilots for The Wadhwani Foundation's Ed-Tech platforms, achieving over 95% accuracy
  in performance through optimized prompt engineering.
- Designed advanced prompting strategies, including COT, TOT, ReAct, Reflexion, Self-consistency and multiagent methods, improving system robustness and preventing prompt hacking.

SOUL AI Remote, IN

AI Engineer Intern

Sept 2023 - Jan 2024

- Trained a state-of-the-art large language model (LLM) using Reinforcement Learning with Human Feedback (RLHF), achieving over 90% accuracy in user responses.
- Applied expertise in Computer Science and Mathematics, including **Statistics**, **Geometry**, and **Probability**, to develop an AI tutor optimized for educational applications.

# AWARDS AND CERTIFICATIONS

- Best Paper Award: IRCCTSD Conference, SRM University, 2024
- ML-Ops Specialization: Duke University, 2024.
- **Azure AI-900**: Microsoft, 2024.
- Best Project Award: Library Management System: DBMS, 2023.
- Reinforcement Learning: Hugging Face, 2023.

### Volunteer Work

- 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.
- Community Service: Led a crowdfunding campaign for Rotary Club, raising 10,000 INR for Polio-free India.