

Priyanka Moorthy

408-480-8833 | priyankamoorthycit@gmail.com | [linkedin: priyanka-moorthy](https://www.linkedin.com/in/priyanka-moorthy) | [github: priyanka-moorthy](https://github.com/priyanka-moorthy)

EDUCATION

Masters in Artificial Intelligence

San Jose State University

Aug. 2021 – May 2023

San Jose, CA

Integrated MSc in Software Systems

Anna University

Aug. 2014 – May 2019

India

EXPERIENCE

AI Engineer, Espercare LLC

Technology used: Vertex AI, Cloud Run, Python, TensorFlow, OpenCV, Docker, GCP, Gemini

Jul 2023 – Present

San Jose, CA

- Architected and deployed a multi-agent system utilizing Gemini for function calling. Engineered cooperative agents to dynamically route queries and perform grounded retrieval across billing and provider configuration domains
- Implemented continuous evaluation framework on Vertex AI with human feedback integration and pairwise preference comparison. Monitored key performance metrics including routing accuracy 92%, response correctness, and query latency of 2s, achieving over 90% workflow efficiency while eliminating manual lookups
- Developed an ensemble extraction pipeline increasing healthcare claim processing efficiency by 60%.
- Achieved 27% performance gains via domain-specific fine-tuning and implemented an LLM as a Judge framework for automated QA and validation.
- Automated claim categorization and downstream data ingestion, significantly reducing manual overhead and accelerating end-to-end workflows.

Software Engineer, RedBlackTree Tech

Technology used: Python, NLP, Django, GCP, RabbitMQ, Celery, Docker, MySQL

Jan 2019 – May 2020

India

- Architected and served an end-to-end NLP pipeline (OCR, CNN classification) for automated lease provision extraction, reducing identification time by 82% and achieving an AUC of 0.92.
- Built a scalable, asynchronous processing system using RabbitMQ and Celery to manage distributed tasks and control model inference concurrency.

PROJECTS

Image Generator | Cycle-GAN, Tensorflow, OpenCV, Computer Vision

May 2023

- Implemented a pix2pix cycle GAN network for image translation from line art to colored butterfly images with a U-Net Generator and patchGAN Discriminator.
- Synthesized dataset by cropping out the background using a pre-trained classifier, and applied canny edge filter for the train and test data. Achieved discriminator and generator loss of 0.91 and 1.23 respectively.

Multi-Task Robot Learning | VLA Models, PyTorch, MuJoCo

Feb 2026

- Built a 77M parameter Vision-Language-Action model combining EfficientNet-B0 vision encoder, DistilBERT language encoder, and cross-attention fusion to predict robot manipulation actions from camera images and natural language instructions.
- Implemented behavior cloning pipeline with scripted expert policies for pick/push/place tasks, achieving 22% loss reduction through multi-task learning on Apple Silicon GPU with MPS acceleration.

TECHNICAL SKILLS

Machine Learning & AI Techniques: RAG, Agent Orchestration, Deep Learning, NLP, Reinforcement Learning, Computer Vision

Libraries & Packages: PyTorch, TensorFlow, Transformers, LangChain, LlamaIndex, Scikit-Learn, OpenCV, Pandas, NumPy

Cloud & MLOps: GCP, AWS, Docker, Kubernetes, RabbitMQ, Celery, Git, Flask, Django

Languages: Python, SQL, Java, C++, JavaScript, Shell Scripting