

Dhara Sanjivkumar Patel

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EDUCATION

University of California, San Diego

Master of Science in Computer Science and Engineering

San Diego, CA

September 2024 – Present

Indus University

Bachelor of Technology in Computer Science and Engineering

Ahmedabad, India

June. 2020 – June 2024

EXPERIENCE

Graduate Researcher

April 2025-Present

MURO Lab

San Diego, USA

- Developed and implemented a distributed Gaussian variational inference algorithm for multi-agent SLAM, improving mapping accuracy by 15% in real-time robotic systems
- Adapted and extended an existing codebase to integrate Marvelmind beacons, LiDAR sensors, and SLAM frameworks, enabling seamless compatibility with project hardware.
- Conducted over 50 simulation and hardware-in-the-loop tests using Python and ROS, increasing system stability and reducing localization errors by 18%.

Python Developer Intern

January 2024-July 2024

TM SYSTEMS

Ahmedabad, India

- Identified backend performance issues and optimized systems using Django and Flask, achieving a 25% improvement in scalability.
- Developed RESTful APIs to address inefficient front-end and back-end data transfer, improving communication and boosting data transfer efficiency by 20%.
- Collaborated with cross-functional teams to gather clear requirements and align efforts, resulting in a 95% on-time project delivery rate.

Data Science Intern

August 2023-January 2024

TM SYSTEMS

Ahmedabad, India

- Implemented a face recognition system for employee login to address slow, insecure manual processes, improving security by 40% and reducing login time by 50%.
- Devised a machine learning model to automate data extraction from medical PDFs, reducing manual effort, achieving 90% accuracy, and boosting efficiency by 35%.
- Engineered a chatbot and text summarization system for PDF inputs, enhancing user interaction and reducing manual review time by 60%.

Data Analyst Intern

July 2023-August 2023

OASIS INFOBYTE

Remote

- Structured and cleansed datasets to ensure 98% accuracy and consistency, improving data integrity and reliability to support better decision-making and strategy optimization.
- Created data analysis reports and visualizations, improving data comprehension by 45% among stakeholders.
- Mapped data patterns from quarterly reports to optimize business strategies, increasing project efficiency by 25% through targeted recommendations.

PUBLICATION AND PROJECTS

Emotion Detection in Text : A Deep Learning Approach for Sentiment Analysis.

October 2023

- Patel, D. "Emotion Detection in Text : A Deep Learning Approach for Sentiment Analysis." International Journal of Novel Research and Development 8.10(2023): b506- b516

Utilising Machine Learning For Enhanced Security System Through Voice Recognition.

October 2023

- Patel, D. "Utilising Machine Learning For Enhanced Security System Through Voice Recognition." Journal of Emerging Technologies and Innovative Research 10.10(2023): c744- c757

Cold Email Generator | LLAMA, LangChain, ChromaDB

- Addressed low engagement and inefficiencies in manual cold emailing by developing an automated generator using LLAMA for language generation, LangChain for orchestration, and ChromaDB for context-aware memory retrieval; streamlined outreach workflows and boosted response rates by tailoring tone and content to recipient profiles.

TECHNICAL SKILLS

Languages: Java, Python, SQL, JavaScript(ES6+), HTML/CSS, MATLAB

Frameworks: React, Node.js, Flask, Django, NLTK, OpenCV, Scikit-learn, PyTorch, FastAPI, ROS

Developer Tools: Git, Docker, Google Cloud Platform, VS Code, Visual Studio, PyCharm, IntelliJ

Area of Interest: Robotics, AI and ML Algorithms, Distributed Systems, Motion Planning, MLOps, Deep Learning

Cerification: AWS Academy Machine Learning for Natural Language Processing