Shreyas Makwana

Rajkot, Gujarat 360004

📞 (+91)9510087633 ✉ shreyasmakwana.smh@gmail.com 🔗 Linkedin/in/shreyasmakwana ⬛ Github/shreyas-makwana

Education

Indian Institute of Information Technology, Diu Campus November 2022 – May 2026
Bachelor of Technology in Computer Science *Diu, India*

Relevant Coursework

- Data Structures
- Database Management
- Computer Networks
- Software Engineering
- OOPS
- Artificial Intelligence
- Algorithms Analysis
- Computer programming
- Operating System

Projects

Neural Text-to-Speech System | *PyTorch, Tacotron2, HiFi-GAN, Python, CUDA* December 2024

- Developed an end-to-end speech synthesis system combining Tacotron2 for mel-spectrogram prediction and HiFi-GAN for waveform generation, achieving a 30% improvement in naturalness scores based on Mean Opinion Score (MOS) evaluations.
- Implemented CUDA-accelerated parallel processing techniques and batch inference optimization, reducing model inference time by 45% while maintaining high-quality audio output.
- Designed and trained a custom pronunciation dictionary to handle edge cases and proper nouns, improving pronunciation accuracy by 25% for challenging words and names.

Fuzzy Intensification of Images | *Matlab, Image Processing* October 2024

- Designed an image enhancement algorithm that improved image clarity by 40% on low-contrast datasets while preserving brightness levels.
- Processed 500+ images using contrast enhancement, improving visual quality and reducing noise by 30%.
- Implemented adaptive histogram equalization techniques, resulting in 45% better detail preservation in shadow and highlight regions.
- Developed custom edge detection algorithms to improve feature extraction accuracy by 25%.

Spy Camera | *Python, Selenium, Flask API* March 2024

- Monitored camera feeds for motion detection, reducing false alerts by 20% through optimized algorithms.
- Enabled motion-triggered recording, efficiently storing 50+ hours of footage with optimized storage and retrieval.
- Utilized Selenium to automate testing processes, increasing test execution speed by 30%.
- Implemented real-time event notification system with 99.9% delivery reliability.
- Built scalable microservices architecture supporting simultaneous monitoring of multiple camera feeds.

Technical Skills

Languages: C, C++, Python, R, HTML, CSS, JavaScript
Databases: SQL, MongoDB
Developer Tools: VS Code, Google Cloud Platform, Archimate, TensorBoard
Technologies/Frameworks: React, Node, Linux, Git, Postman, Express, Selenium, Bootstrap, Tailwind, DevOps, TensorFlow, PyTorch, Deep Learning

Technical Achievements

- LeetCode - Solved 200 problems with rating of 1600
- CodeChef - Earned 3 star with rating of 1605

Professional Development

- Google Cloud Digital Leader Certification   - Completed extensive training in cloud architecture and deployment
- NVIDIA Deep Learning Fundamentals   - Finished comprehensive online training specializing in fundamentals of deep learning. Certificate