Sian Shinjo

noss123.github.io

+91 96336 21992 sian.shinjo@students.iiit.ac.in linkedin.com/sianshinjo github.com/noss123

EDUCATION

International Institute of Information Technology, Hyderabad Expected May 2028
B.Tech in Computer Science and Engineering ***(CGPA: 9.17)*** *Hyderabad, Telangana*

- **Relevant Coursework:** Data Structures and Algorithms (C), Operating Systems and Networks (C), Probability and Statistics

TECHNICAL SKILLS

Languages: C, C++, Python, HTML, CSS, JavaScript, SQL
Frameworks/Libraries: Node.js, NumPy, pandas, matplotlib, scikit-learn, libpcap
Tools/Systems: Git, Linux/Unix, Make, QEMU, Wireshark, Arduino
Databases: MySQL, MongoDB

KEY PROJECTS

Saral AI Enhancements | *Python*, *FastAPI*, *JavaScript (Node.js)*, *BHASHINI*, *Sarvam AI*

- Extended the open-source research tool Saral AI by developing two prototype features on top of the existing codebase to automate conversion of academic research papers into reels and podcasts; done for a hackathon (Megathon 2025).
- Engineered a ”Paper-to-Reel” pipeline to generate an engaging short-form reels summarising academic papers in the form of a humorous student-professor conversation. This featured automated composite video generation in Python by overlaying translated speech files onto video templates with precise dialogue synchronisation.
- Implemented a ”Paper-to-Podcast” pipeline featuring extended host-driven discussions for long-form technical summaries.
- Integrated BHASHINI and Sarvam AI APIs to facilitate multilingual machine translation and high-fidelity Text-to-Speech in order to support generation of content in multiple Indian languages.

On-Device Image Inpainting | *Qualcomm QIDK*, *Python*

- Developed a comprehensive benchmarking framework to evaluate inpainting models like LaMa-Dilated, AOT-GAN and MI-GAN on the Qualcomm Innovators Development Kit (Snapdragon 8 Gen 3).
- Profiled end-to-end model performance across CPU, GPU and NPU backends, analysing latency and memory usage.
- Created a custom dataset pipeline of 100+ composite images (with corresponding ground-truth masks) for evaluating inpainting performance against SOTA benchmarks.
- Assessed visual fidelity of inpainted outputs using a multi-metric approach utilising 9+ metrics to account for both pixel-level accuracy and perceptual similarity.

Reliable UDP Protocol | *C*, *UDP Sockets*, *OpenSSL*

- Engineered a custom transport-layer protocol over UDP in C to provide reliable, connection-oriented data transfer with TCP-like semantics.
- Built a dual-mode application supporting both robust file transmission with MD5 checksum verification and a real-time chat interface.

OTHER PROJECTS

Network Packet Sniffer: Terminal-based packet analysis tool in C to capture and decode network traffic in real-time.
Custom Unix-like Shell: Command-line interpreter with I/O redirection, piping and job control by leveraging the POSIX API for process management and signal handling.

ACHIEVEMENTS

Megathon 2025 Runner-up: Under the Saral AI problem statement in Hyderabad’s largest student-run hackathon.
Academic Awards: Secured Dean’s List 2 (Top 10%) in semester II and Dean’s List 3 (Top 15%) in semester I.