

Shanmukha Sharma Parri

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Education

M.Tech, IIT Bhubaneswar

Computer Science and Engineering (pursuing)

B.Tech, IIIT RGUKT NUZVID

Computer Science and Engineering; GPA: 8.8/10

Experience

TCS — Research Intern

May 2024 - Aug 2024

- Trained a T5 decoder-only model for proactive conversation using a custom dataset.
- Generated conversational text based on environmental context and scenario for human-robot interaction and assistance.
- Implemented explainability by extracting evidence from utterances using attention mechanisms and average pooling.
- *Technologies:* Python, PyTorch, Hugging Face.

Testsigma — Software Engineer (Intern + Full-time)

May 2021 - Jun 2022

- Developed and refactored web applications for open-source projects, focusing on component reuse.
- Redesigned database models and improved integration with external platforms for automated test report generation.
- *Technologies:* SQL, Angular, Spring Boot, GitHub.

Projects

Human-Robot Interactive Dialogue System (MTP Thesis)

[2024]

- Developed a T5 model-based system enabling robots to initiate context-aware conversations based on environmental inputs from IoT sensors.
- Integrated explainability by highlighting parts of human utterances used for action and event classification, improving user trust.
- *Technologies:* IoT, Python, NLP, TensorFlow.

CAPTCHA Recognition

[2022]

- Enhanced image recognition by implementing noise reduction techniques and character segmentation to improve CAPTCHA detection accuracy.
- *Technologies:* Python, TensorFlow, OpenCV.

GAN for MNIST Digit Generation

[2022]

- Built a Generative Adversarial Network (GAN) to generate synthetic handwritten digits from the MNIST dataset.
- Focused on improving the stability of the GAN through advanced training techniques and hyperparameter tuning.
- *Technologies:* Python, PyTorch.

Achievements

Kaggle Competition: RSNA 2023 Abdominal Trauma Detection

Bronze medalist, Ranked 91 with Team MLDA_IITBBS_GRP1, focusing on medical imaging for abdominal trauma detection.

Event Organizer

Organized national-level tech events such as *Frontend Monster* and *SQL Master*, managing event logistics and participant coordination.