



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL
(An Institute of National Importance)

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M Tech Dissertation- Monthly Progress Report

Student Details

Roll Number	24CSM1R23
Name of the Student	Udit Jain
Program & Specialization	M.Tech. (CSE)
Academic Year	2025-26
Semester	Odd Sem
Supervisor	Prof. Mangubala Bisi
Month	September

Monthly Progress details:

Title	Reliability of Explainable AI on Software Defect Detection (SDD)		
Problem statement/Objectives	The challenge is to design a new parameters to check the reliability of XAI in software defect detection where unstable explainability can be risky		
Progress Summary	<ul style="list-style-type: none"> Implemented the approach for calculating the reliability score for SDD problem. Coded and tested the pipeline with proposed reliability metrics (GLR, HIT@K, ECE). Obtained stable, reproducible results confirming approach effectiveness. 		
Planned work for next month	<ul style="list-style-type: none"> Implementing the framework on different models. Testing the generalizability of Metrics. 		
Any Publication (Conference paper/ Journal paper/ Book Chapter etc.)	—		
TA duties attended (weekly basis)	—		
Supervisor remarks (please Tick one of the options) about the student's project progress.	Excellent	Satisfactory	<input checked="" type="checkbox"/>
	Very Good	Marginal	<input type="checkbox"/>
	Good	Poor	<input type="checkbox"/>
<u>Comments (if any):</u>			

Udit Jain
 Signature of the Student

M. Bisi 23.09.2025
 Signature of the Supervisor/Guide