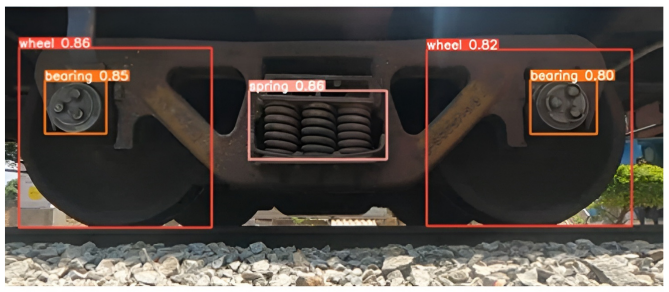


Machine Vision Inspection System for Rolling Stock (Indigenously Developed)

Train Components Identification



INTRODUCTION

- MVIS is innovated jointly by
 - DFCCIL / Indian Railways
 - IISc
 - IISc Startup for Railways
- It is designed to automate the inspection process for rolling stock.
- The system integrates advanced computer vision, AI & ML, object detection, IoT, and advanced cloud computing techniques.

FEATURES

- Real-time System
- SMS alerts, Web based alerts
- Improved safety measures
- 24/7 monitoring in all weather conditions



Wagon Number



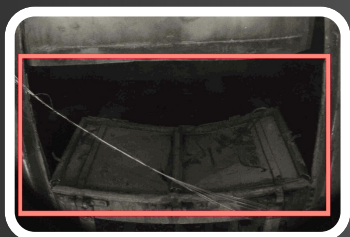
Hanging part

Our current system can identify the following defects with precise location information:

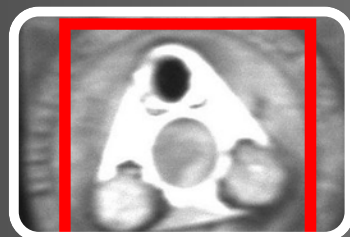
- Open wagon doors
- Wagon number & Loco number
- Hanging parts
- Defective EM pad
- Missing/Broken Spring Assembly
- Missing axle cover or end cap screws
- Undercarriage defects

TAGGED WAGON ID	WAGON NO.	SIDE	DEFECT IMAGE	DEF
W19	21140919496	right		Har view

Graphical User Interface



Open Wagon Door



Missing end cap screws