

# Piston Defect Detection using Computer Vision

A defect in a piston refers to any abnormality or flaw that compromises the functionality, performance, or durability of the piston. Pistons are crucial components in internal combustion engines, where they play a critical role in converting the pressure generated by the combustion process into mechanical energy.

To solve defects in a piston using computer vision, we can employ image analysis techniques to automatically detect and classify abnormalities. By training a computer vision model with a dataset of labeled images containing normal and defective pistons, the model can learn to recognize different types of defects. Once trained, the model can be used to analyze images of pistons in real-time, identifying any defects present.

This allows for efficient and automated defect detection and ensure the production of high-quality pistons.

# MY LEARNINGS

1 June



- Exploring Open-source
- Discovering Courses
- Revising important Machine concepts

2 June



- Numpy
- Pandas
- Matplotlib
- OpenCV

3 June



- OpenCV Course
- Image Processing
- object detection algorithms
- KNN

4 June



- Convolution operation
- Basics of CNN
- Edge detection
- Feature extraction.