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# Case Study

# Metal Washers: Edge & Surface Defects

## Solution Scope

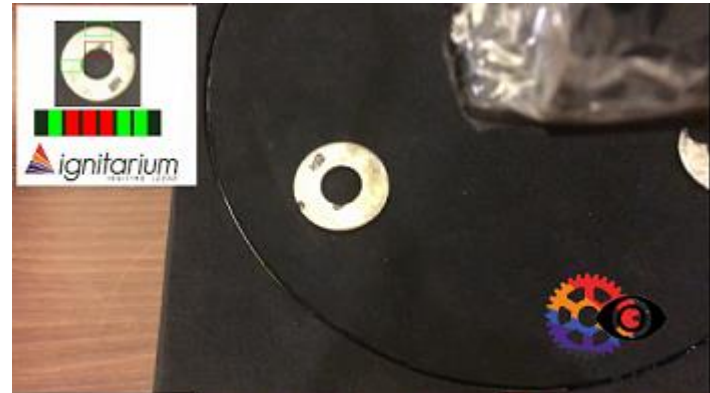
- Develop a solution for detection of edge, surface and color defects
- Target hardware: Low cost embedded platforms with hardware accelerators (GPU, DSP, custom HW)



Lab Setup Emulating Conveyor Belt

## Highlights

- Custom neural network and algorithms to achieve higher accuracy and speed
- Uses consumer grade webcam for image sensing
- Requires only few hundred images during training
- Incremental training of neural network with data augmentation
- Usage of both Classical CV as well as Neural Nets to achieve optimum results



Detecting Defects in Metal Washers in Real Time



# THANK YOU



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