



## INTRODUCTION

Automated inspection and defect detection are critical for high throughput quality control in production systems. They are widely adopted in many industries for detection of flaws on manufactured surfaces such as metallic rails, semiconductor wafers, contact lenses and so on. Recent developments in deep learning have significantly improved our ability to detect defects.

In this session, you will learn how to develop deep learning-based approaches to detect and localize different types of anomalies. Keeping in this view Indian Machine Tool Manufacturers Association is organising a training program on "**Automated Defect Detection using Vision Based Techniques Powered by MathWork India**".

## KEY TAKE AWAYS

- Data access and preprocessing techniques including denoising, registration and intensity adjustment.
- Semantic segmentation and labeling of defects and abnormalities
- Defect detection using MobileNetv2, Grad-CAM and other deep learning techniques.
- Deploying to multiple hardware platforms such as CPUs and GPUs.

## FEE PER PARTICIPANT (PER LOGIN)

**Rs. 499/-**

+18% GST

**IMTMA Members/ Micro Companies/ Individuals/  
Educational Institutions / Students/ IMTMA Non  
Members/ Others**

**USD 20/-**

**Overseas Participants**

## PARTICIPANT PROFILE

This session is for Engineers interested in Automated Visual Inspection and AI in Manufacturing.

**Industry** Across industry - Manufacturing, Automotive, Aerodef, Energy Production, Semiconductor

## FACULTY

This programme will be conducted by **Mr. Jayanth Balaji Avanashilingam**, Application Engineer MathWorks India.

**Mr. Jayanth Balaji Avanashilingam** works as an Application Engineer at MathWorks in the area of Language of Technical Computing. He primarily focuses on areas of Data Analytics for the application involving with Time-Series data. He has 8+ years of research and industrial experience, where he was working developing AI/ML/DL solutions for various application areas, such as retail optimization, computer vision and Natural Language Processing

### For Registration Contact

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**REGISTRATION** : Prior registration with an online advance payment is must. Number of participants is limited and will be accepted on 'First Come First Serve' basis. A Certificate of participation will be issued to participants.