

# Image Processing for Computer Vision

## Session 1



collected

## Topics

- About The Course
- About Me
- Introduce Yourself

# About The Course

**Image Processing**

**Tensorflow**

**Pytorch**

**Model Designing, Building, Training, Fine-Tuning**

- Classification
- Detection
- Self Supervised Learning
- Denoising
- Super Resolution
- Segmentation
- Diffusion
- Contrastive Learning

## About Me

Md. Manuaruzzaman

AI Engineer & Course Instructor - Innovative Skills Ltd.

Instructor - Eshikhon.com

## Introduce Yourself

Name

Current position

Experience with Python and ML and rate yourself

Why computer vision?

# Image Processing Segment Outline

- Environment Setup
- Image and It's Terminologies
- Pixel, Resolution, Color Mode, Changing Color Mode
- Image Loading and Saving
- Image rescaling, resizing
- Geometric Transformation
- Histogram Equalization
- Thresholding
- Filtering
- Convolution
- Morphological Operation
- Edge and Contour Detection

## Local Environment Setup

**Installing python:**

[On Windows](#)

[On MacOS](#)

**Installing Editor and Packages:**

[Environment Setup for ML and DL](#) (this works for both)

## Next topics:

- Image and terminologies

