

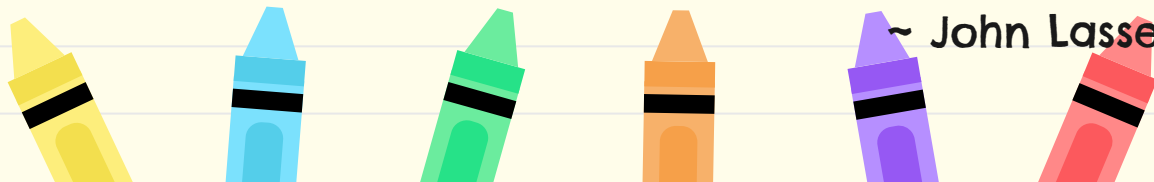
The background features a light cream color with faint horizontal lines. Large, colorful geometric shapes (triangles and polygons) in blue, orange, red, and green are positioned around the edges, creating a dynamic, collage-like effect. Smaller triangles of the same colors are scattered throughout the background.

# DIY GROUP – 10

# AIR CANVAS

The art challenges the technology, and the technology  
inspires the art.

~ John Lasseter



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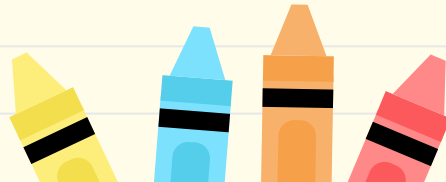
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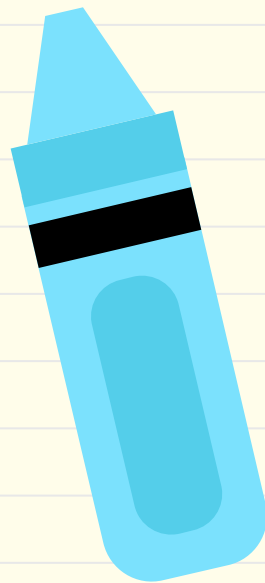
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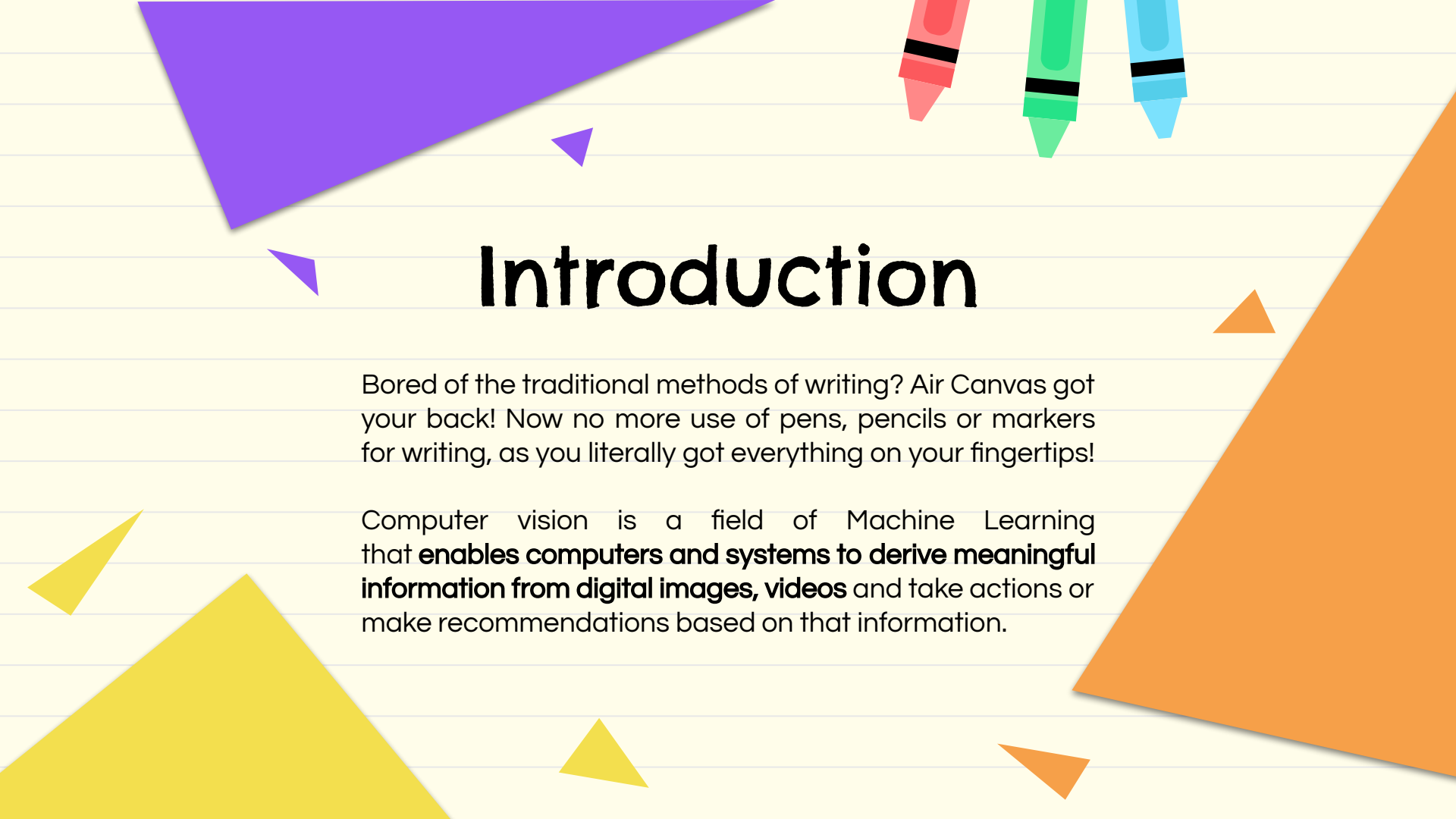
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01

# Introduction




The background is a light cream color with faint horizontal lines. It is decorated with several large, colorful geometric shapes: a large purple triangle in the top-left, a large orange triangle in the bottom-right, and a large yellow triangle in the bottom-left. There are also smaller triangles of these colors scattered around. In the top-right corner, there are three stylized crayons: a red one, a green one, and a blue one, all pointing downwards.

# Introduction

Bored of the traditional methods of writing? Air Canvas got your back! Now no more use of pens, pencils or markers for writing, as you literally got everything on your fingertips!

Computer vision is a field of Machine Learning that **enables computers and systems to derive meaningful information from digital images, videos** and take actions or make recommendations based on that information.

The background is a light cream color with faint horizontal lines. It is decorated with several large, colorful geometric shapes: a blue triangle in the top left, a green triangle in the top right, an orange triangle in the bottom left, and a red triangle in the bottom right. Scattered around these are smaller triangles of the same colors.

# OUR TEAM



# Yasaswani Rongali

(21CS10082)

User Interface (UI) Design



**Eeshaan Sethia**  
(21GG10013)

Coding and Debugging



**Rajvardhan Singh**  
(21HS10040)

Video Editing and Research





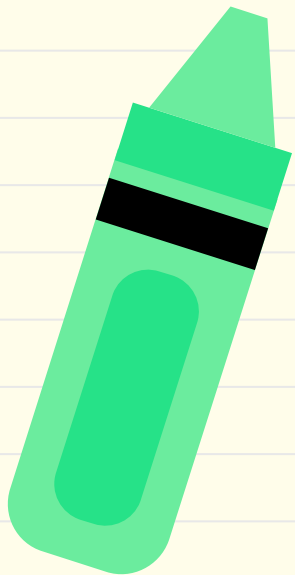
**Sarvesh Kumar Singh**  
(21GG10033)

Demonstration and Script Writing



**Shashank S.**  
(21EC30046)

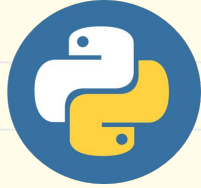
Script Writing and Research



02

# Overview

# Overview of Our Project



## Coding

There is no way, Python does not strike our minds when we talk about Computer Vision.



## UI Design

What better software, than Adobe Illustrator, to make beautiful vector graphic based UI for our project.

# Python Libraries



## Mediapipe

It provides some great ready-to-use Machine Learning solutions for Computer Vision tasks.



## Open CV

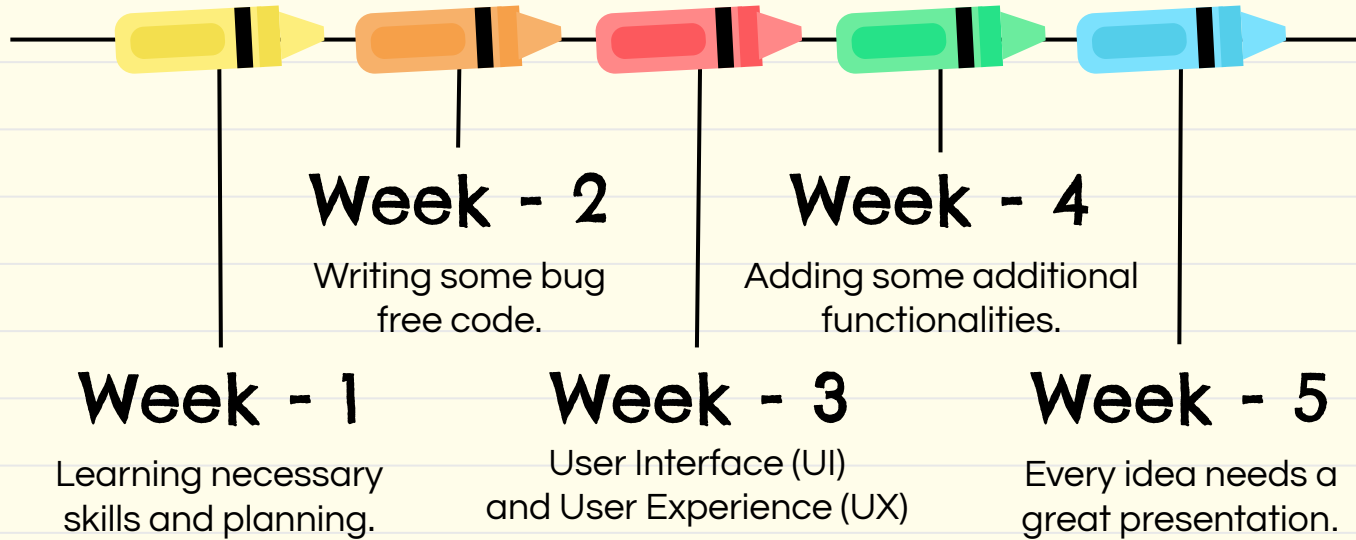
It is a widely used library for Image detection, recognition, processing and analysis.



## Pillow

Also known as PIL – Python Imaging Library adds support for saving images in different formats.

# Timeline





03

Demonstration

DIY GROUP – 10

# AIR CANVAS

Demonstration







# 04 Objectives and Future Scope

# Objectives!

The idea for Air Canvas was a result of our interest in digital drawing and smart photo recognition software.

Advancement in automation process and improving the interface between man and machine.

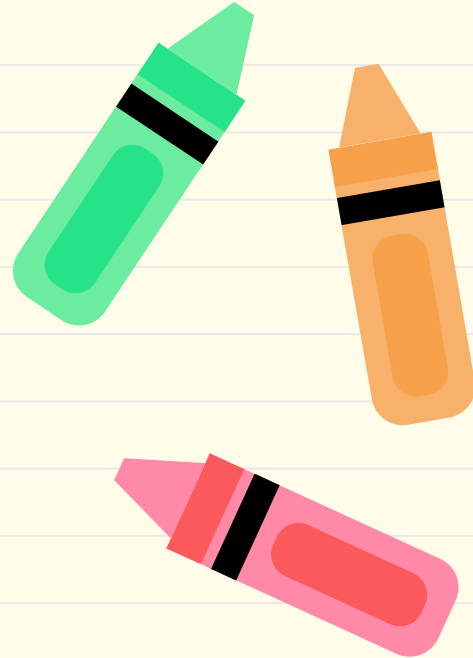
The initial motivation was a need for a dustless classroom for the students to study in.



The background is a light cream color with faint horizontal lines. It is decorated with several large, colorful geometric shapes: a large blue triangle in the top left, a large green triangle in the top right, a large orange triangle in the bottom left, and a large red triangle in the bottom right. Scattered around these are smaller triangles of the same colors (blue, green, orange, and red).

# Future Scope

1. Education – Can be a great software for teaching and presentations.
2. Can be used for contactless signatures during delivery of orders by drones.
3. Can serve a great purpose in the easy communication of differently abled people.
4. AR/VR - Huge scope in gaming industries.



# Resources

Here are the resources that helped up throughout this project:

## Videos:

- [Computer Vision](#)
- [OpenCV](#)
- [Mediapipe](#)

## Books and Articles

- [What is Computer Vision? - IBM](#)
- [5 Ways You Can Learn Computer Vision](#)
- [OpenCV Official Documentation](#)
- [Mediapipe Official Documentation](#)
- [Programming Computer Vision](#)
- [Air Canvas with Numpy and OpenCV](#)
- [Air Canvas with Raspberry Pi](#)
- [Computer Vision Projects](#)
- [Air Canvas in Python](#)

## Images and Template:

- [Presentation Templates](#)
- [Images](#)

**Thank you!**

Do you have  
any questions?

