

COMPUTER VISION COURSE PORTFOLIO

**SUMMARY OF LEARNING JOURNEY
OSCAR CORTEZ
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Introduction

- **OVERVIEW OF THE COURSE AND ITS OBJECTIVES.**
- **HIGHLIGHT THE IMPORTANCE OF COMPUTER VISION IN MODERN TECHNOLOGY.**

Module 1: Introduction to Computer Vision

- **Key Concepts:**
 - Overview of Computer Vision
 - Image Processing Techniques
- **Notable Assignments:**
 - Assignment on Image Filtering
 - Project on Edge Detection
- **Lessons Learned:**
 - Understanding the Basics
 - Hands-on Practice

Module 2: Cameras and Sensors for Computer Vision

- **OVERVIEW OF CAMERA AND SENSOR TECHNOLOGY.**
- **KEY PROJECTS OR ASSIGNMENTS:**
 - **CAMERA CALIBRATION**
 - **SENSOR DATA PROCESSING**
- **PRACTICAL APPLICATIONS:**
 - **IMPORTANCE IN DATA ACCURACY**
 - **REAL-WORLD USE CASES**

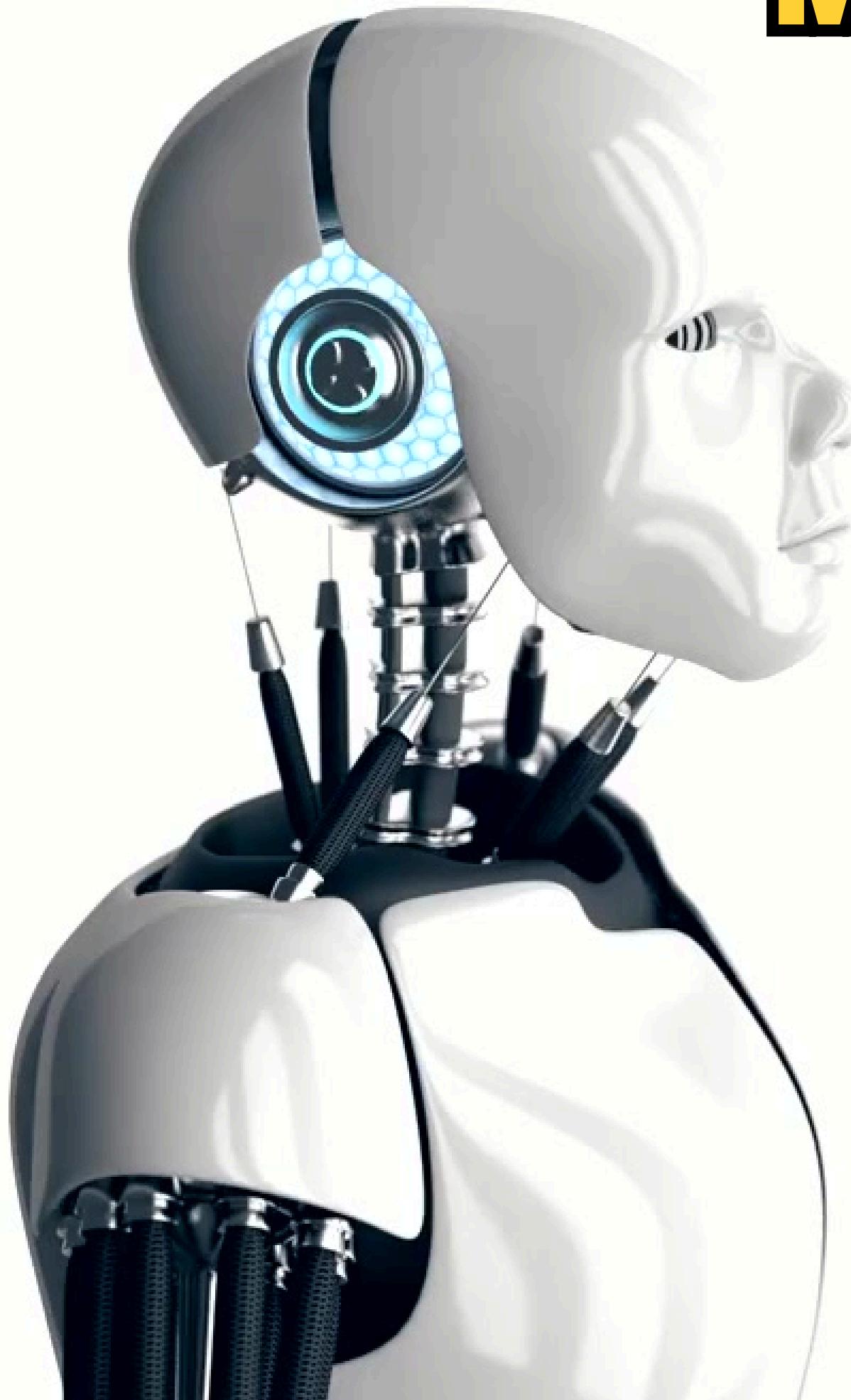
MODULE 8: BASIC CNN ARCHITECTURES AND TRANSFER LEARNING

- **Introduction to CNNs**
- **Key Concepts:**
 - **Convolutional Layers**
 - **Pooling Layers**
 - **Transfer Learning**
- **Significant Assignments:**
 - **Implementing CNNs**
 - **Using Pre-trained Models**
- **Insights Gained:**
 - **Advantages of Transfer Learning**

MODULE 9: ADVANCED ARCHITECTURES

- Overview of advanced architectures
 - R-CNN, Fast R-CNN, Faster R-CNN
 - YOLO, SSD
- Key Projects or Assignments:
 - Implementing YOLO
 - Comparing Architectures
- Future Applications:
 - Object Detection
 - Real-time Processing

Module 16: Final Project



- **Summary of the final project**
 - **Predicting Airplane Delays**
- **Key Findings:**
 - **Model Performance**
 - **Challenges and Solutions**
- **Reflections:**
 - **Learning Experience**
 - **Practical Skills Gained**

Conclusion

- **SUMMARY OF THE LEARNING JOURNEY**
- **KEY TAKEAWAYS:**
 - SKILLS ACQUIRED
 - FUTURE DIRECTIONS

Questions & Answers

- OPEN FOR ANY QUESTIONS OR DISCUSSION POINTS**