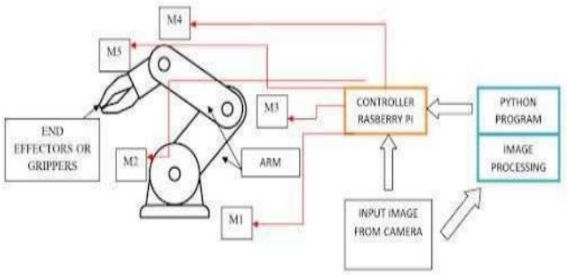
Amity Centre for Artificial Intelligence

Building a smarter world with Artificial Intelligence.

Powered with **Most Advanced Supercomputing Facility**

"SENARC—Industrial Robotic Arm"

Problem Addressed: To ensure packages reach over to customers faster, intelligent automation systems are required.

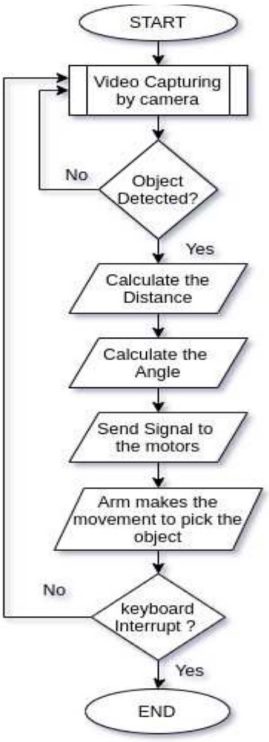


1.Manufacturing: Robotic arms are widely used in manufacturing processes, such as assembly, welding, painting, and quality control. They can perform repetitive tasks with high precision and consistency, leading to increased productivity and efficiency.

2.Material Handling: Robotic arms are used for moving, sorting, and stacking materials in warehouses and distribution centres. They can handle heavy loads and operate in environments that may be hazardous or difficult for humans.

3.Laboratory Automation: In scientific research and pharmaceutical industries, robotic arms are used for automating laboratory processes, such as sample handling, liquid handling, and high-throughput screening.

4.Medical Applications: Robotic arms are used in surgery for procedures that require precision and minimally invasive techniques, such as laparoscopic surgery and robot-assisted surgery.



Computer vision models types

There are many different computer vision models types that are ideally suited for a variety of use cases. These include:

•Object Detection (locates objects in images and videos)

•Image Segmentation (partitions images for easier analysis or interpretation)

•Edge Detection (identifies curves and edges in images)

•Image Classification (identifies and classifies objects within images and videos)

•Feature Matching (finds similar features in two images)

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