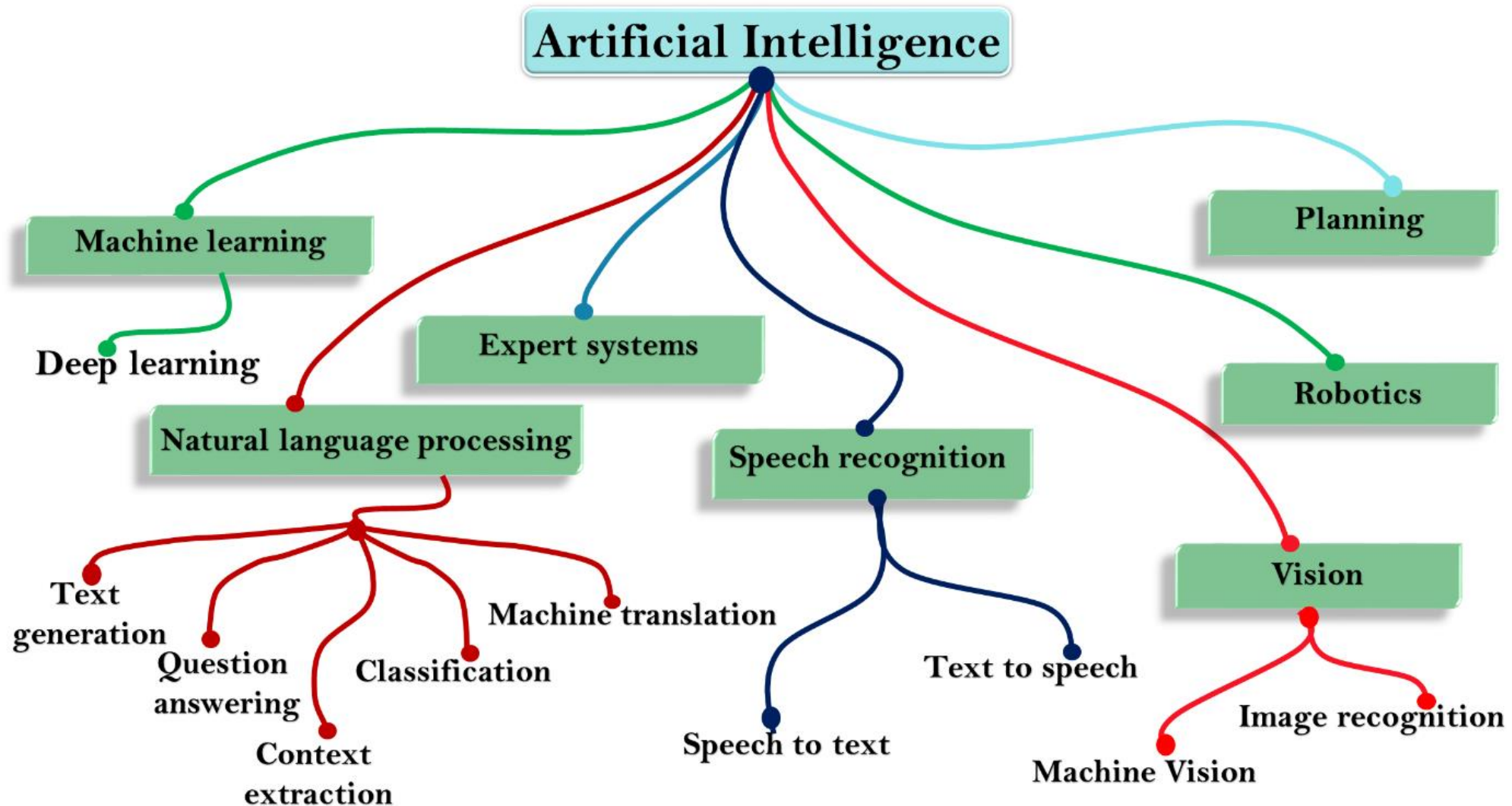Welcome to
INTERNSHIP STUDIO
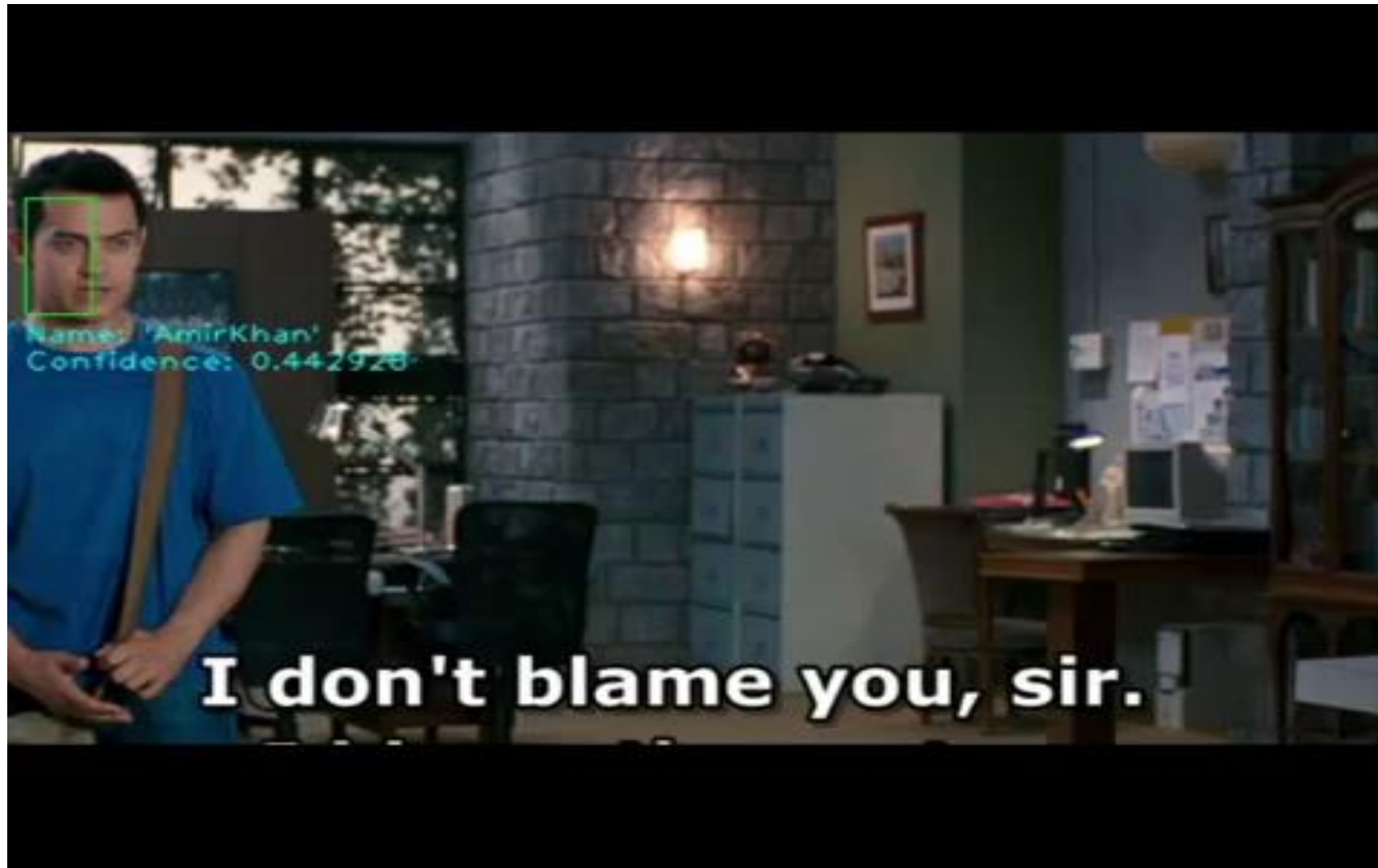
Module 01 | Lesson 02
Applications and examples of AI

AI and its subfields

Applications: Face Recognition

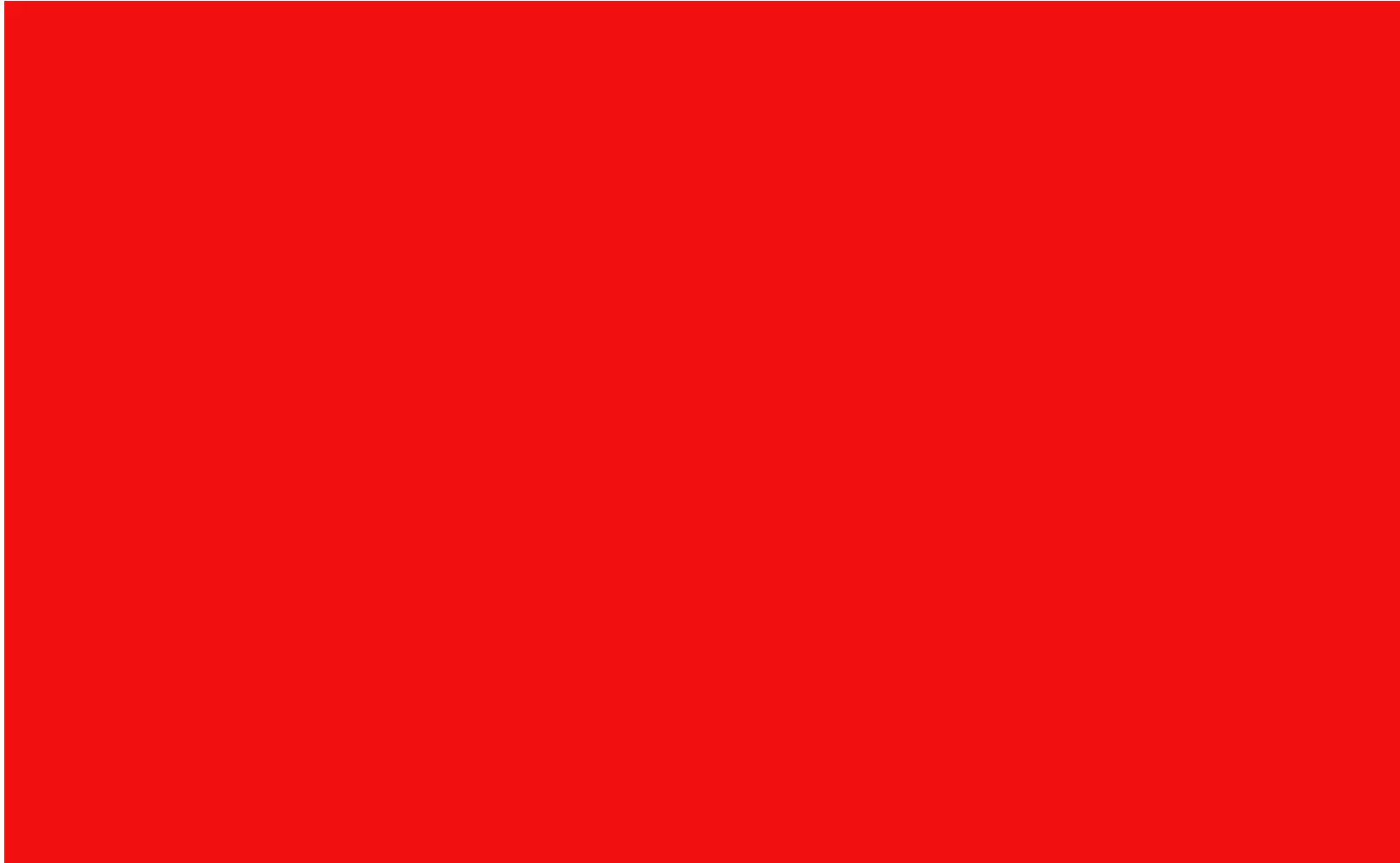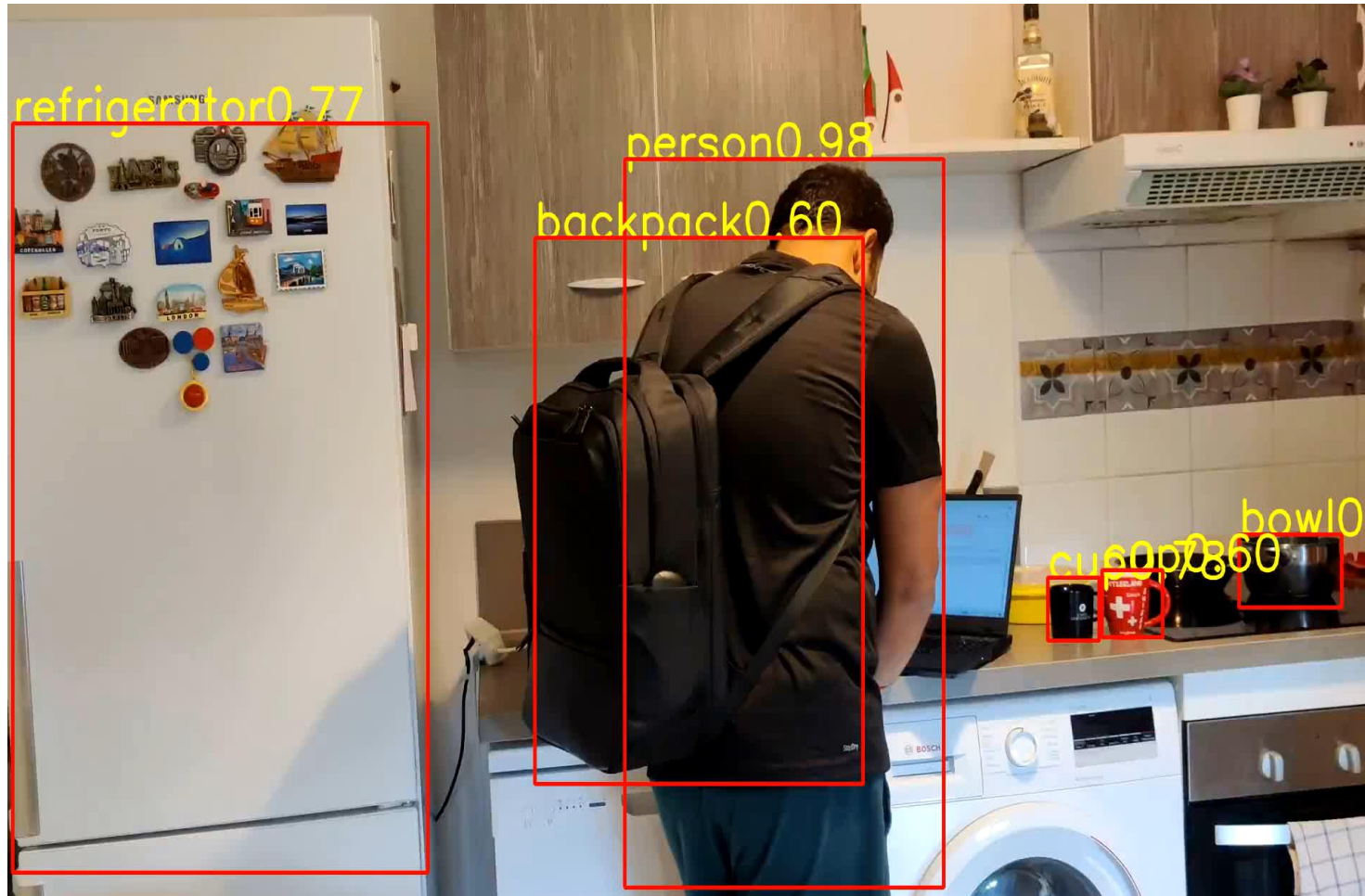# Applications: Face Recognition

Face Detection

Feature Extraction

System Training

Classification

Applications: Eyeball Detection and Tracking

Applications: Object Detection and Tracking

Behind the Scenes

❑ Object Detection
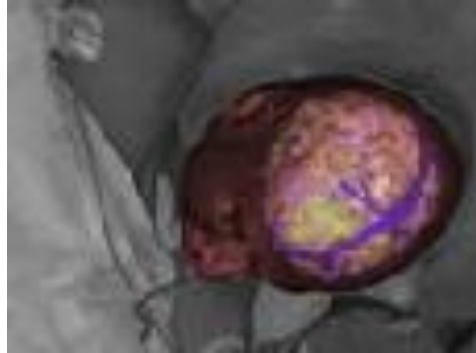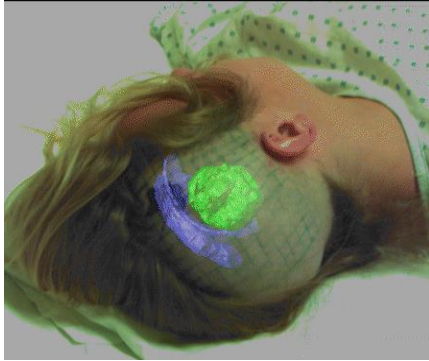
❑ For the given image, it generates the prediction with bounding boxes and probability value.

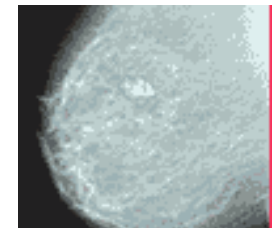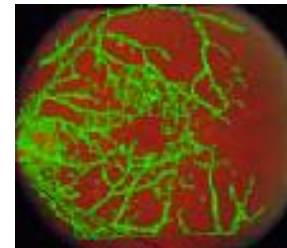❑ It's a supervised machine learning algorithm

❑ Algorithm Name: Faster RCNN
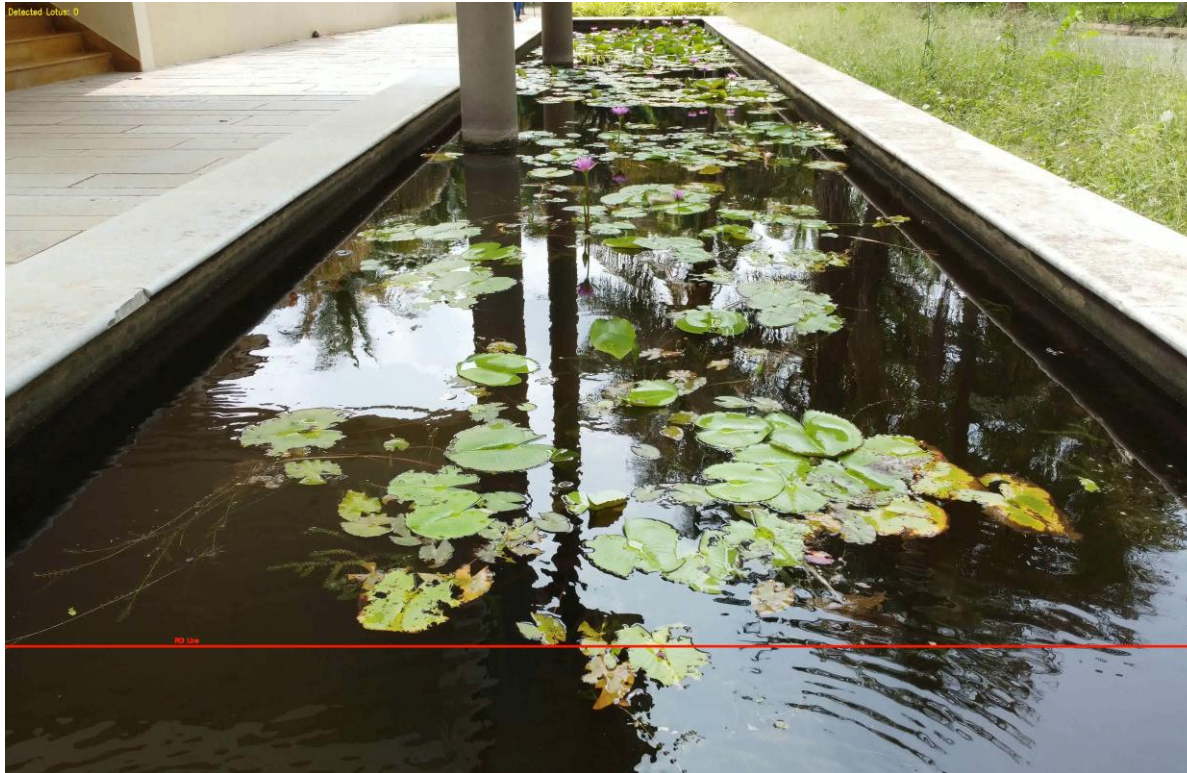
Applications: Medicine
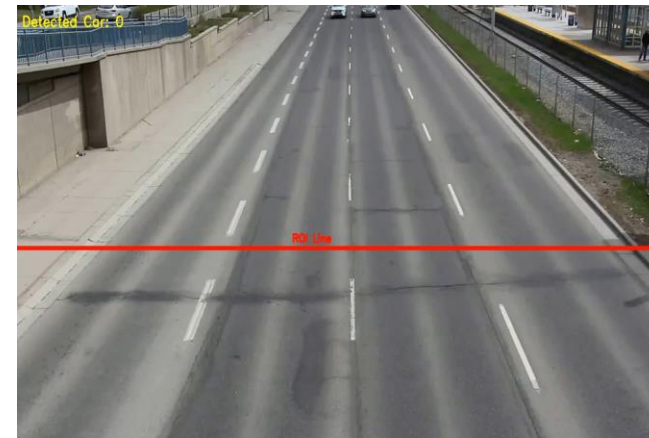
Image guided surgery

Image analysis and enhancement

Applications: Fruit, Flower and Car Counting

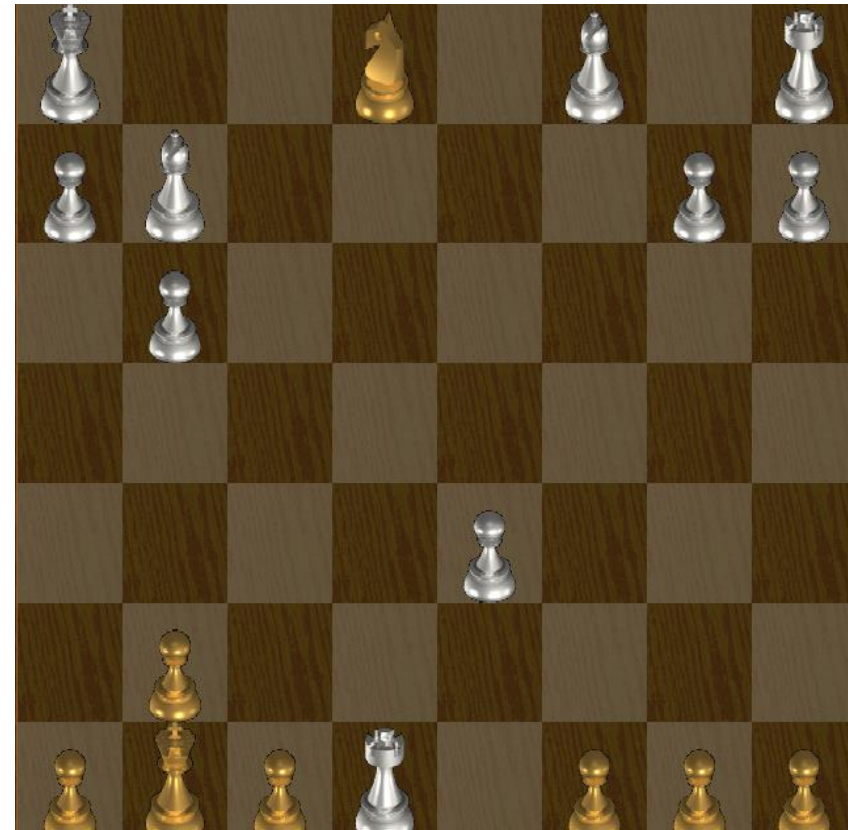### Behind the Scenes

❑It works on top of object detection.

❑Camera should be moving and object should be fixed.

❑It works with the Horizontal and vertical Axis.

❑Can be extended to count the cars in the parking lot, traffic flow on any signal for the traffic management, people count to find the footfall in the shopping mall etc.
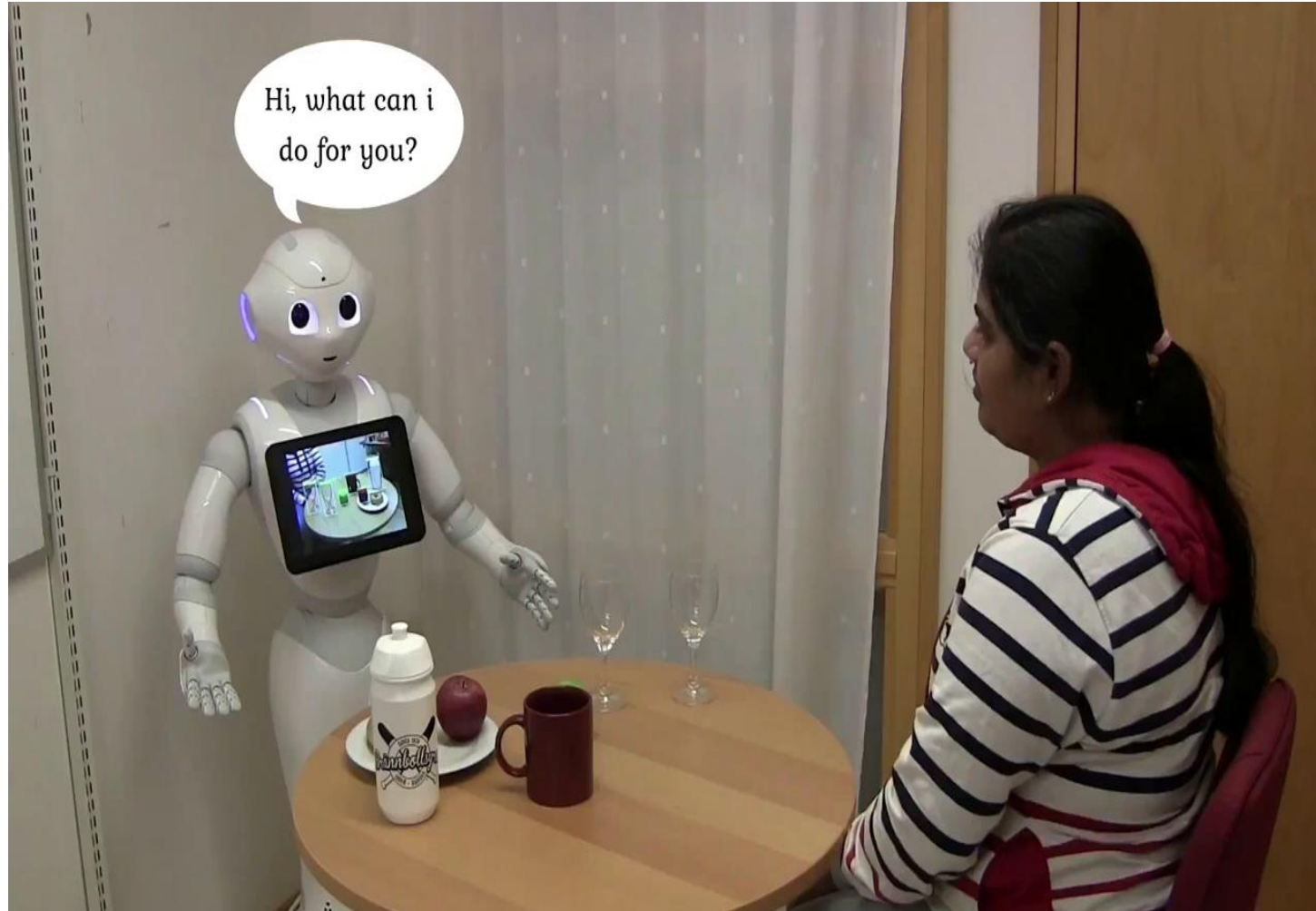
Applications: Games

Applications: Robotics Interaction

Applications: Other application areas:

- **Bioinformatics:**
  - ❖ Gene expression data analysis
  - ❖ Prediction of protein structure

- **Text classification, document sorting:**
  - ❖ Web pages, e-mails
  - ❖ Articles in the news

- **Video, image classification**

- **Music composition, picture drawing**
- **Natural Language Processing .**
- **Perception.**