AI Detection Robot

Submitted in partial fulfillment of
the requirements for the degree of

B.E. Information

Technology By

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Taxonomy used in the Project

PictoBlox is a Scratch 3.0-based graphical programming software that is the ideal companion for setting the first step into the world of programming. Its user-friendly interface and drag-and-drop functionality eliminate the need to memorize syntax and rules that is the case in traditional programming languages and oftentimes scares children and makes them hesitant. As a result, they only require to focus on the problem at hand and develop skills such as logical reasoning and problem-solving – the must-have skills in today's technology-driven world.
Mycroft is an open source voice assistant that respects your privacy. With Mycroft you can listen to music, check the weather, set timers or alarms, ask questions about the world, and much, much more. Unlike other assistants, however, Mycroft is the voice assistant you can trust

Project problem formulation

Most present-day robots are highly inefficient in terms of energy consumption. Not much advancement has occurred in the development of power sources for robots. These robots still rely on age-old power generation and storage techniques. The batteries used in robots are usually unsafe and deplete quickly. The age-old power sources such as lithium-ion and nickel-metal hydride are still being used for robots. Thus, there is a need to develop new energy sources that can power robots for longer periods of time and also have high safety standards. Researchers are currently looking for methods that can replace the age-old batteries in robots, and a breakthrough can power up the robotics sector

The robot which we have made has a controlled Artificials mechanics of detecting an object and clarifying it. We used a software pictoblox.where per objects dimension is been taking and coded it with

The espcam32 is a rectifier for the detection, the TTL connector and the espcam is synced up, with the help of that we can also control the robot.and the serve motor on it is placed for rotation of degree

Program Code


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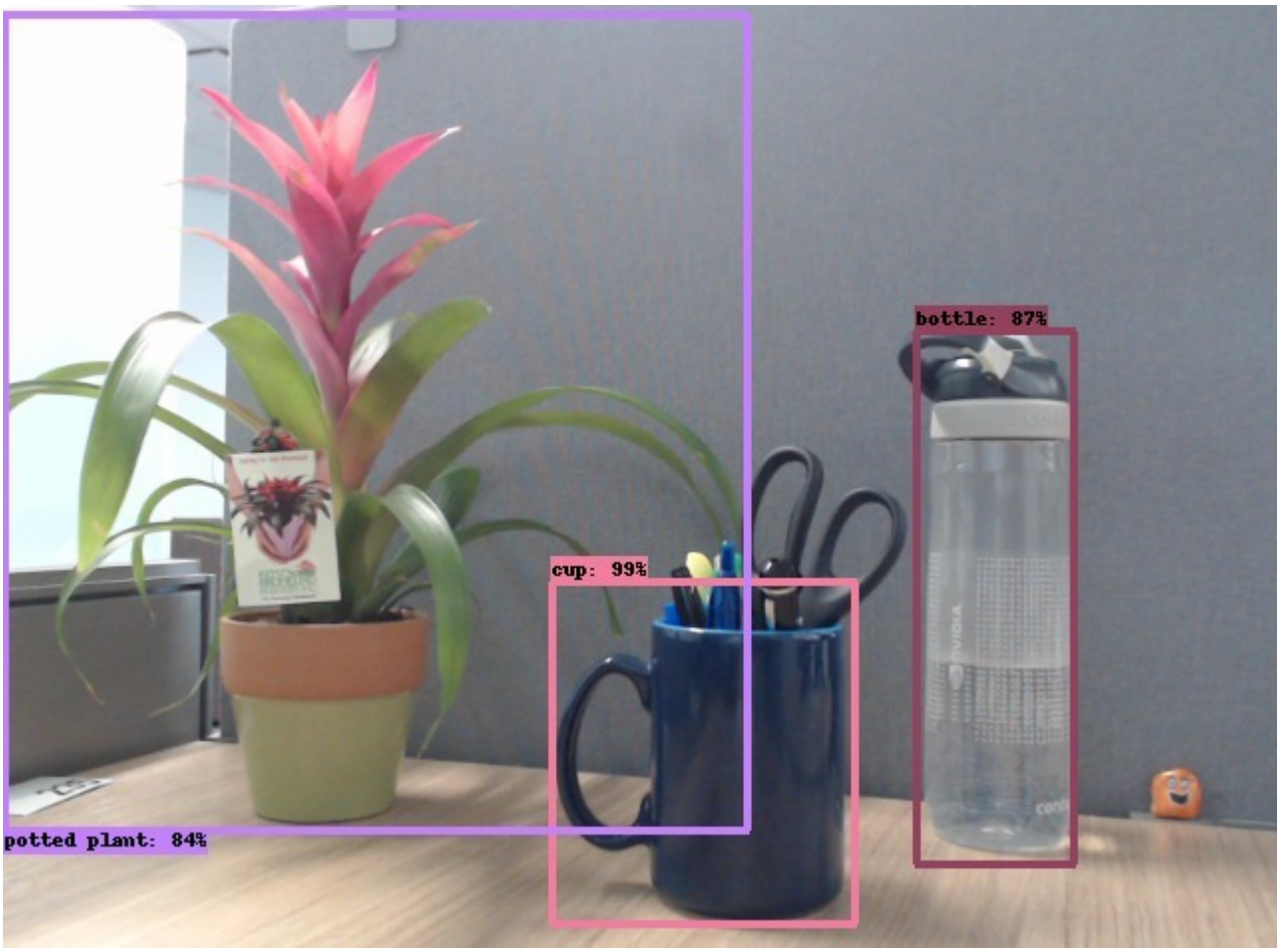
Result/Observation


bottle: 87%
cup: 99%
potted plant: 84%

Conclusion

By using this thesis and based on experimental results we are able to detect objects more precisely and identify the objects individually with exact location of an object in the picture in x,y axis.This paper also provides experimental results on different methods for object detection and identification and compares each method for their efficiencies.

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