

4th Year PROJECT IDEA

Software Development

Intelligent Speaker with Voice Recognition.

Intelligent Camera with Image Recognition Using Neural Networks.



Kamila Michel – G00340498

Maciej Majchrzak – G00332746

24th of September 2018

Description

The AIY Voice Kit from Google lets you build your own natural language processor and connect it to the Google Assistant. All this fit in a handy little cardboard cube, powered by a Raspberry Pi.

The AIY Vision Kit from Google lets you build your own intelligent camera that can see and recognize objects using machine learning. All this fit in a handy little cardboard cube, powered by a Raspberry Pi.

Development

Throughout making of this project we're planning to concentrate at only Artificial Intelligence, and Machine Learning to make a bot who's capable of having a conversation with a human being by writing text.

Once the initial stage of bot is complete we furtherly will focus on voice recognition and making it into actual cube-a-like robot (something like Alexa), which will allow for portability, and use of server where bot's vocabulary data would be kept.

While keeping in mind that it is a year long project we have decided (if time allows) to furtherly develop this AI bot, and add pattern recognition using neural networks. This would not only further develop machine learning part of this AI bot, but also allow for more real-life conversations. Camera would allow for the AI bot to self-engage in conversations about surroundings, like room, weather, etc.

Looking further ahead we have also thought of making a dictionary library for the bot to give it multiple languages capability.