

My Projects

Wei Miao

OWI Robotic Arm Edge with remote control

What's it?

A robotic arm.

Driven by Raspberry pi.

Operated on Android App remotely.



OWI Robotic Arm Edge with remote control

How it works?

The arm kit is programmable via USB

Raspberry pi drives the arm via USB.

Android app sends command to pi
via Bluetooth.



OWI Robotic Arm Edge with remote control

Resources:



BlueSPP

沈焱 / ShenYao China Communication
Everyone
Contains ads
This app is compatible with your device.

Add to Wishlist **Install**

The image shows three screenshots of the BlueSPP app interface. The first screen shows a connection setup between a 'Hello Phone' and an 'Arduino Nano'. The second screen shows a message exchange where the phone sends 'Hello' and the Arduino responds with 'Hello Phone Arduino Nano Light on'. The third screen shows a control panel with buttons for 'Light OFF', 'Motor OFF', 'MCU', 'LED R', 'LED G', 'LED B', and a numeric keypad.

BiBli I

What's it?

A robot made with Roomba
and Arduino.

Famous staff of Longmont
public library.

Moving, speaking, displaying
message via remote control.



BiBli I

How it works?

Roomba is programmable via GPIO.

Arduino drives Roomba and control the LED screen.

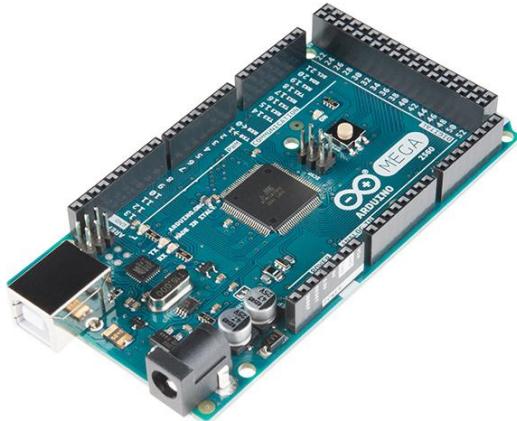
Remote control on a laptop via WiFi.

Control UI developed with Python.



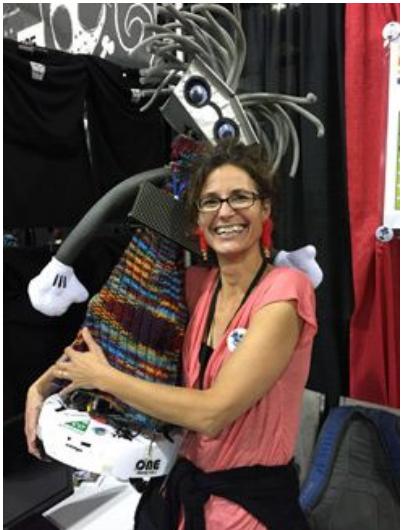
BiBli I

Resources:



BiBli I

More pictures:



BiBli I

More pictures:



BiBli II

What's it?

Second generation of BiBli robot.

Powered by Raspberry pi and Arduino.

It can move, play video&audio, self pilot with obstacle avoidance, voice control.

Come with Android app and webpage for controlling over WiFi.



BiBli II

How it works?

Use raspberry pi as core processor for remote controlling, media playing, voice controlling.

Use Arduino, motor driver board and distance sensor to control moving.

Drive through Android app or web page remotely.



BiBli II

Technology behind:

Raspbian OS.

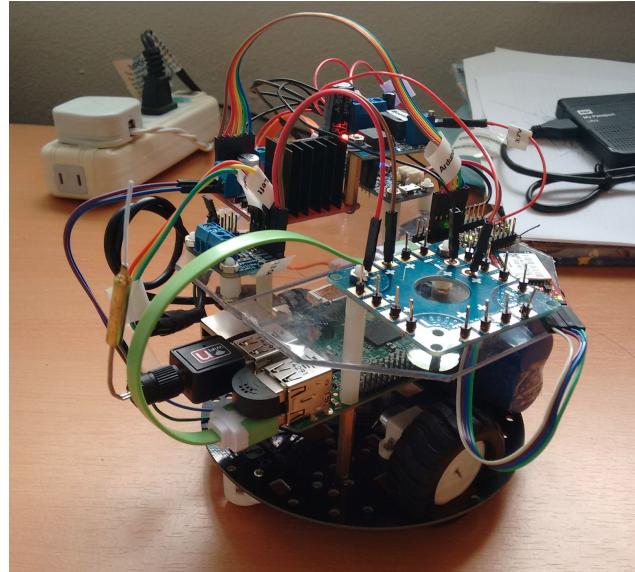
Flask - a micro web development framework for Python.

Jasper - an open source platform for developing voice-controlled applications



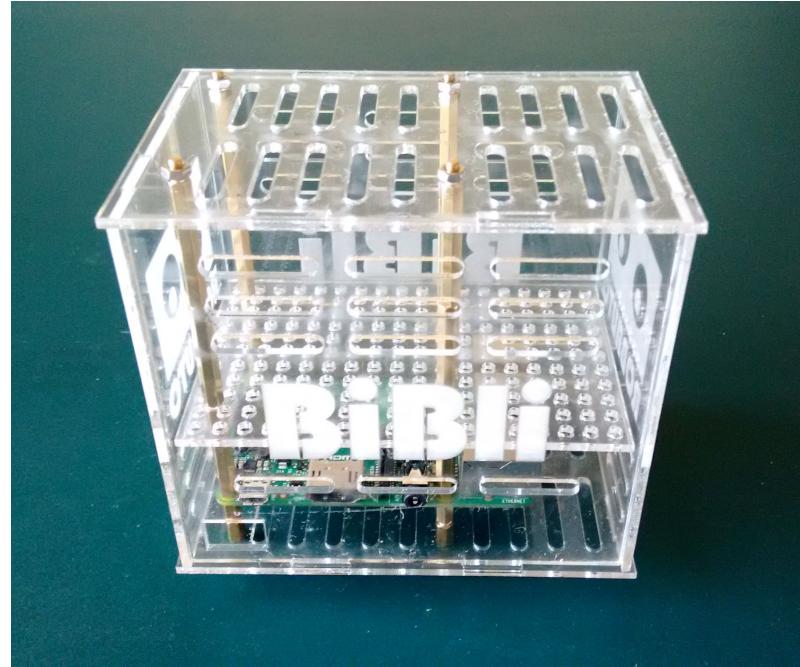
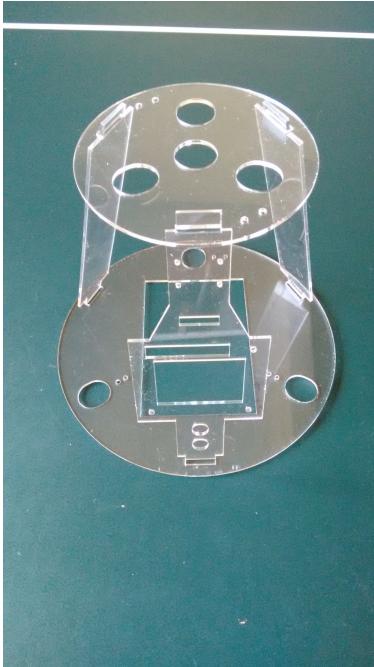
BiBli II

More pictures:



BiBli II

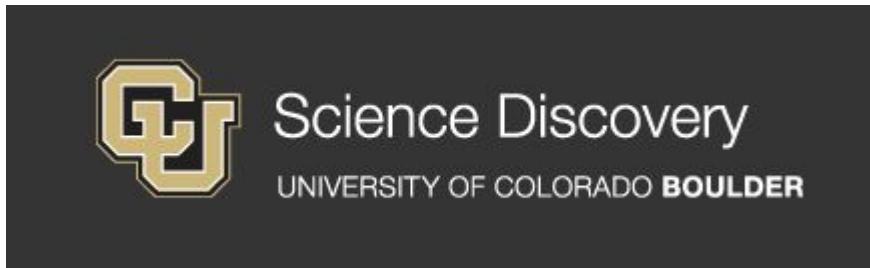
More pictures:



MiraBot



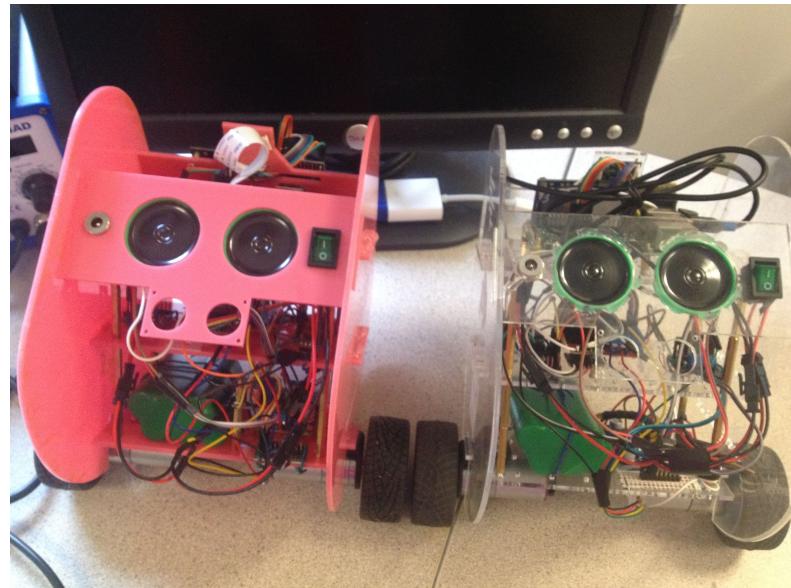
Engineering Excellence Fund
University of Colorado Boulder



Self-balancing

Similar OS with BiBli

<http://www.mira67.com/#>

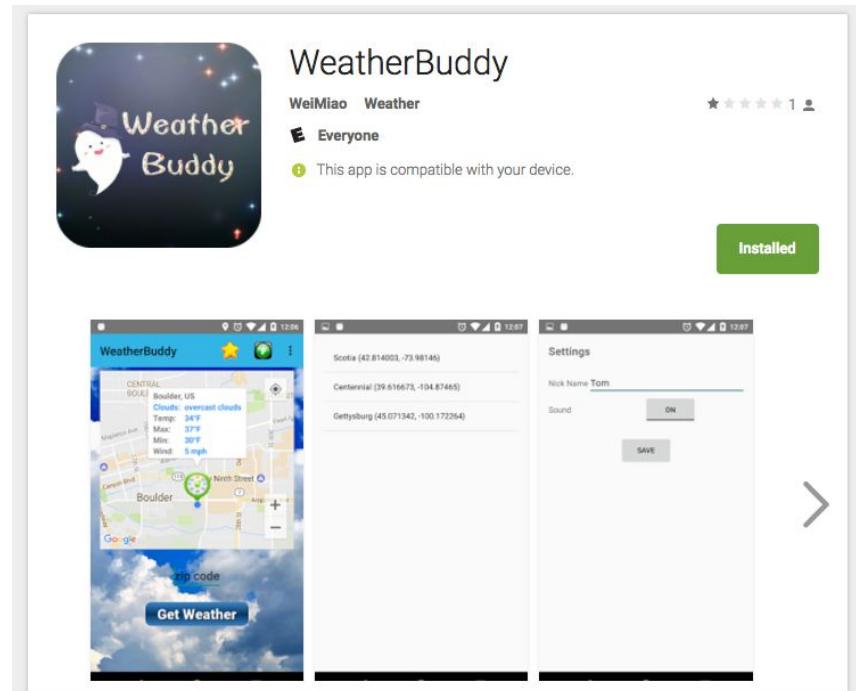


Android app - WeatherBuddy

An weather report app that would report the current weather in voice meanwhile show your location and weather info on the map.

Search by location with zip code or dragging on the map directly.

Save and edit favorite locations.



iOS App - Ecloset

An iOS app to help manage your clothes.

Take a photo for your clothe and add a tag to it.

Search by tag when you need a cloth while you can not remember how many clothes you have in the style or color as you are looking for.

