

TJBot Workshop



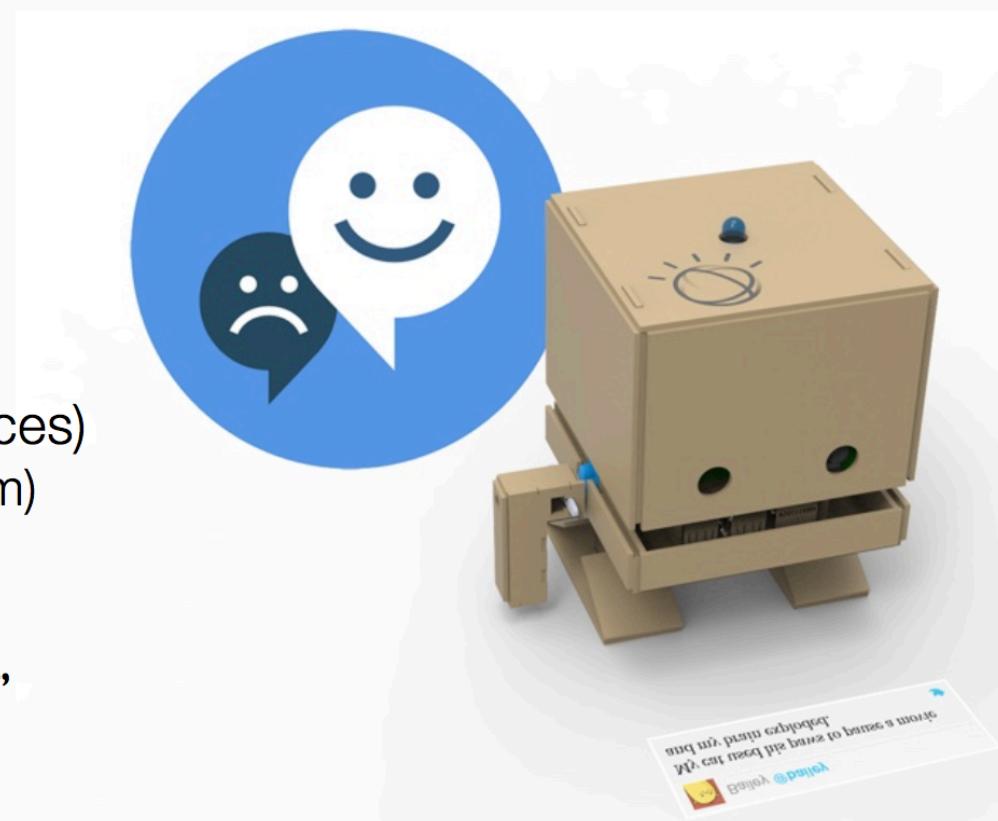
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Developer Advocate



What is TJBot?

- A cardboard robot
 - Simple, approachable
 - Open Source (design, code)
 - Cognitive (IBM Watson services)
 - Extensible (prototyping platform)

Components: Raspberry Pi, LED, Camera, Microphone, Speaker, Servo.



How Does Watson Enable TJBot?

Listen

Watson [Speech to Text](#) service converts spoken speech to text that can be analyzed

Speak

Watson [Text to Speech service](#) converts text to sound using various voices.

Understand Emotions

Watson [Tone Analyzer service](#) can infer the emotion within text. E.g.. it can tell if a message contains emotions like happy , sad, angry

See

Watson [Visual Recognition service](#) can understand the content of an image and describe it.

Translate

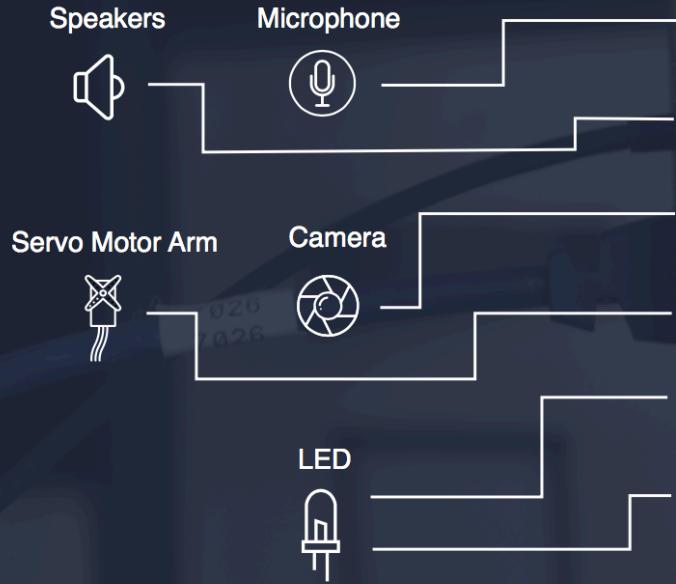
Watson [Language Translate service](#)



Understand Conversations

Watson [Conversation Service](#) can respond to users in a way that simulates a conversation between humans.

TJBot Sensors



Example Capabilities

Listen

Example Watson Services

Speech to text

Speak

Text to speech

See

Conversation

Wave

Vision Recognition

Show emotion

Tone Analyzer

Shine

Example Use cases

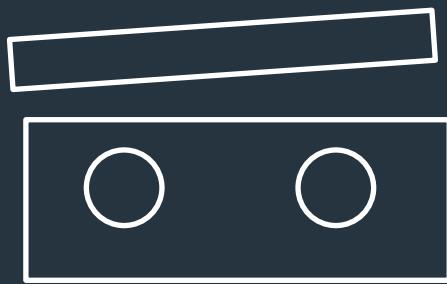
Sentiment Analysis

Virtual Agents (eldercare, home care)

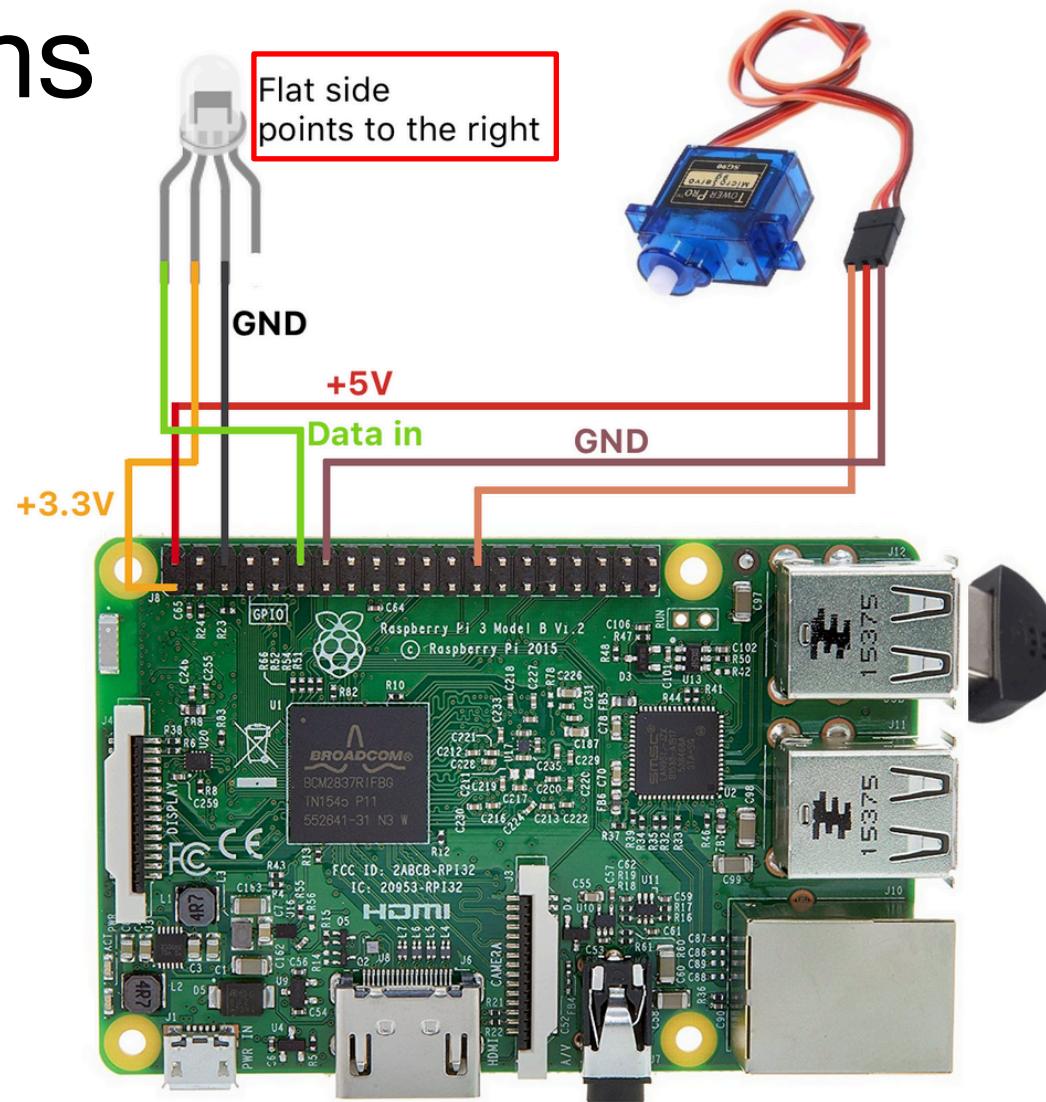
Education (language learning)

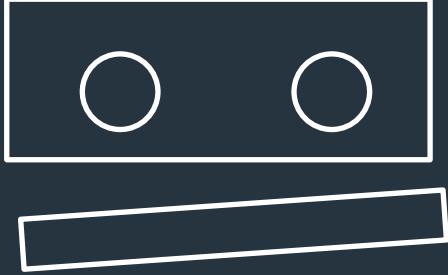
Programming TJBot

- Getting started
- Tying stuff together



Instructions





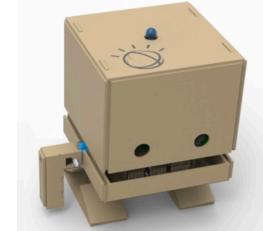
Wi-Fi

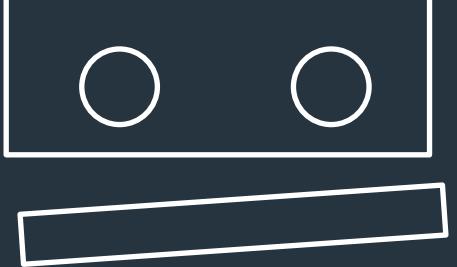
User: tjbottlab

Password: tjbottlab123

How do I Access my TJBot?

1. Turn your Raspberry on!
2. Place your mouse over the Wi-Fi symbol
3. Get your Raspberry IP
4. Go to the terminal in your pc/ PuTTY
5. Execute the command: `ssh pi@000.00.00.000`
6. Password: `raspberry`
7. You can also access your local node-red by opening the browser: `000.00.00.000:1880`

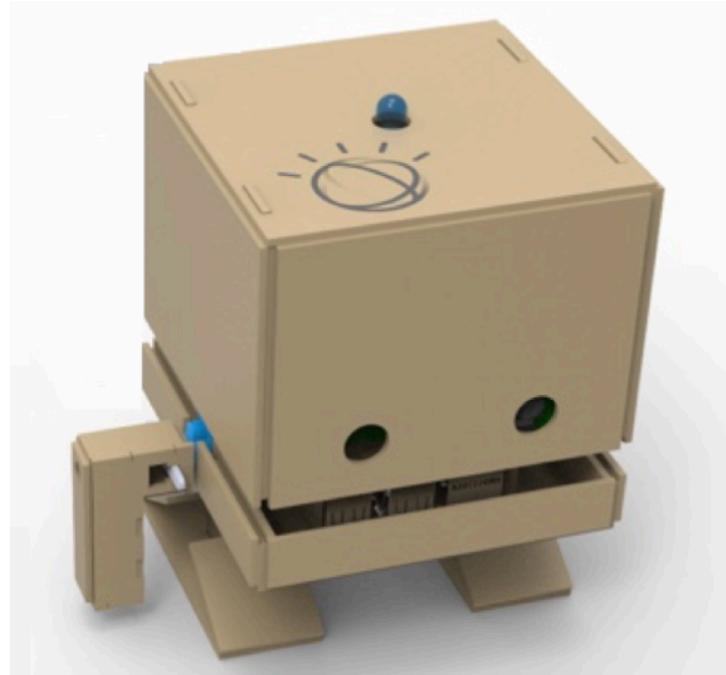




Let's Hands On!

Github to access content:

[https://github.com/
samazon/tjbot](https://github.com/samazon/tjbot)



Thank You!



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