

Don't Be Scared Of Tech!

Presented by Eric Caron – me@ericcaron.com



Am I in the wrong session? That slide showed a lot of pictures of food.

Aren't we supposed to be talking about technology?

What's going on?!?!?!!





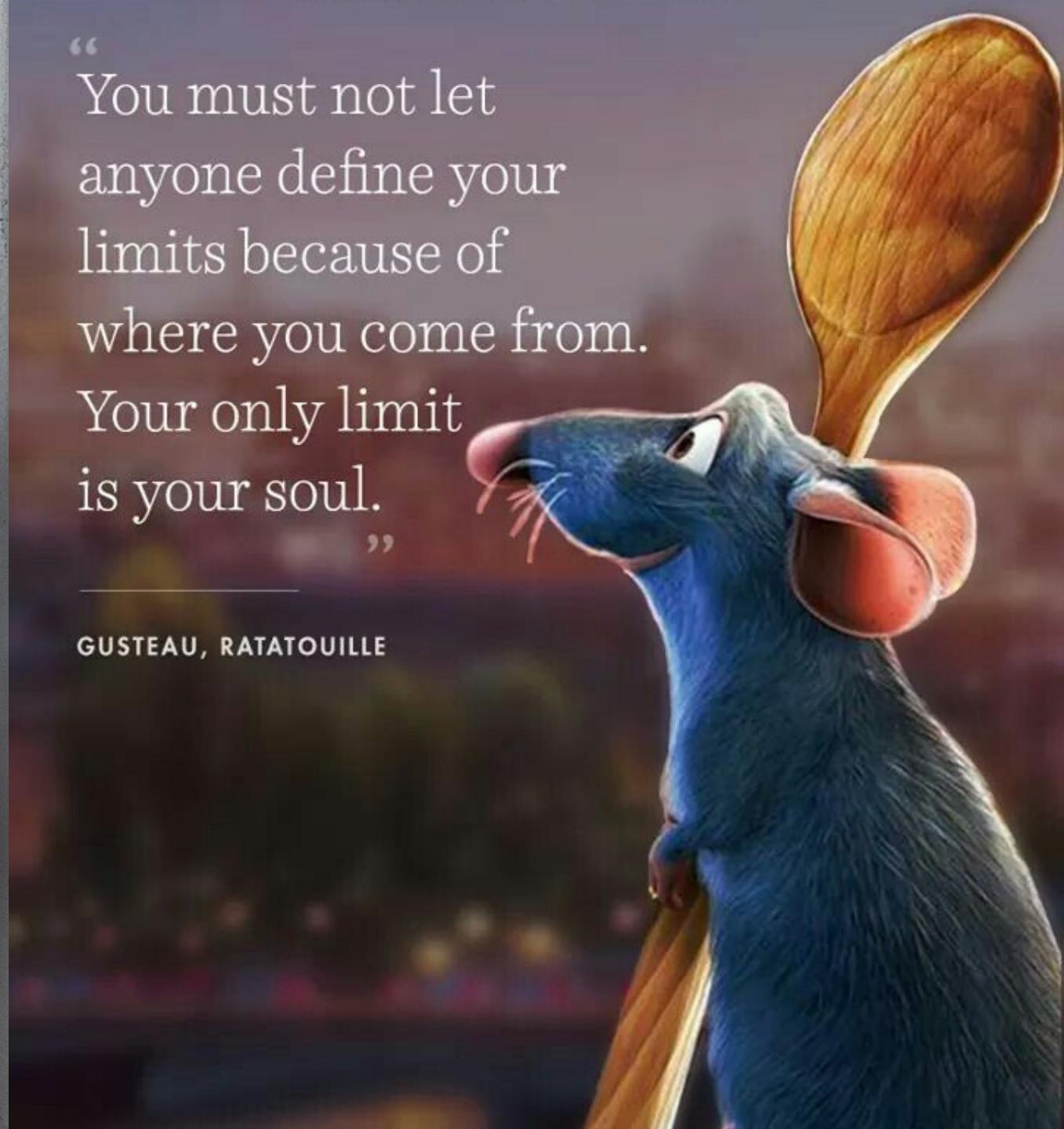
Working with tech is a lot like cooking!

- *Everyone can do it – just depends on access, practice & interest.*
- *If you tackle this picture all at once, you don't stand a chance at success. If you break it into individual dishes, you got this.*
- *Some “chefs” make you think its unattainable – this is to protect their jobs.*
- *The best “chefs” show that it is within everyone’s grasp.*



“ You must not let anyone define your limits because of where you come from. Your only limit is your soul. ”

GUSTEAU, RATATOUILLE

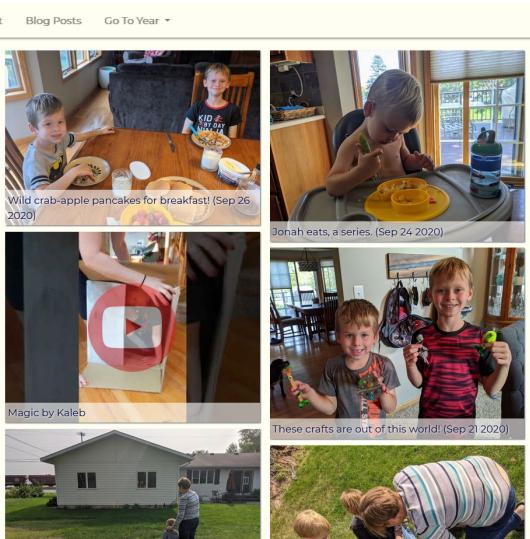


Hi. I'm Eric

If you have questions, I'm at me@ericcaron.com



1 I'm a Minnesota native and I've been a nerd for a very long time.



2 I live in Eden Prairie with my wife, three sons, two dogs and a frog.



3 I work at Caribou Coffee. Before that I worked at Best Buy, and before that a couple startups.

The One Thing To Remember

Do not be intimidated by technology.

Every problem is solvable if you break it down into small enough parts.

Real skill comes from being effective at figuring out what the parts should be and knowing how to find answers.

Respect technology.
Do not fear it.



Let's Build a Doorbell

More specifically, we'll build a doorbell that tweets to @GenesysT every time it is pressed.

Using basic parts, we'll walk step-by-step (including Googling) through:

1. How buttons and lights work
2. How to send a basic tweet
3. How to wire it all together
4. A light show (if there's time)

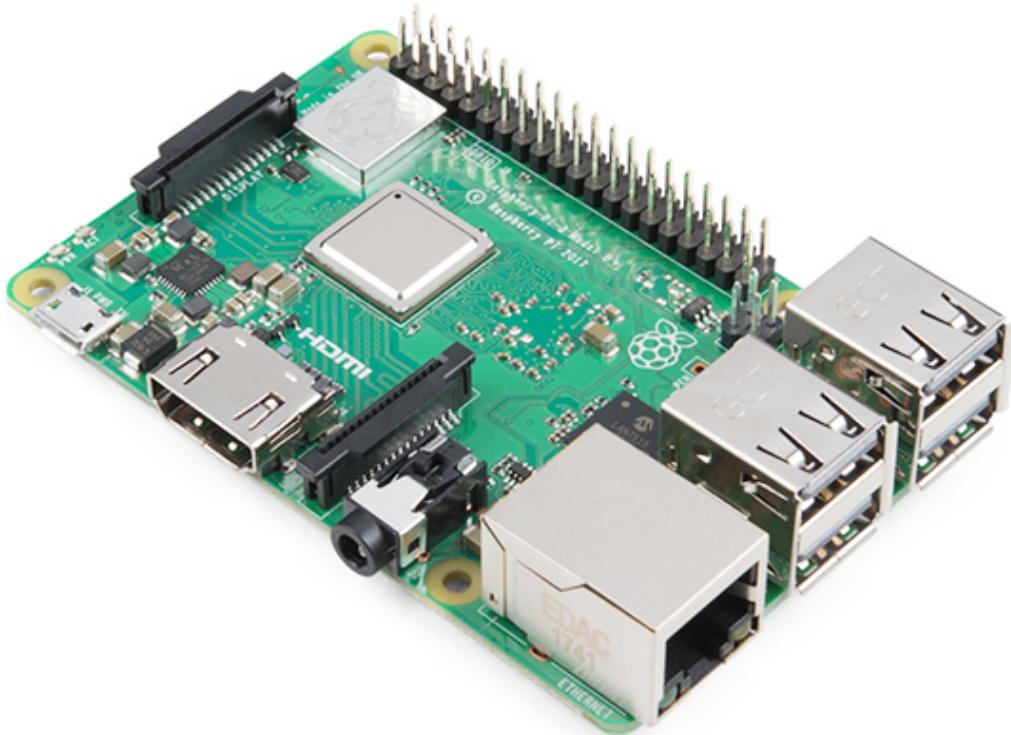
What started me on this journey...

I wasn't content with a standard night light.



Step 0 – The Computer

We'll be using a Raspberry Pi. It is the size of a deck of cards, runs Windows or Linux, and costs between \$5 and \$35.



Step 1 – The Button

If a button lights up, it is actually two simple machines working together.



Google raspberry pi button led python

All Shopping Videos Images News More Settings Tools

About 1,710,000 results (0.52 seconds)

[www.raspberrypi.org › forums › viewtopic](#) ▾

[Controlling an LED using a button and python - Raspberry Pi ...](#)

Mar 24, 2018 - I'm trying to control an **LED** with a **button** and **python**, however I can't get the **LED** to turn off after the **button** is switched off. Here is the circut ...

[www.raspberrypi.org › gpio › python › README](#) ▾

[GPIO in Python - Raspberry Pi Documentation](#)

LED methods include `on()` , `off()` , `toggle()` , and `blink()` . **Button**. To read the state of a **button** connected to GPIO2, you can use this code: `from gpiozero import ...`

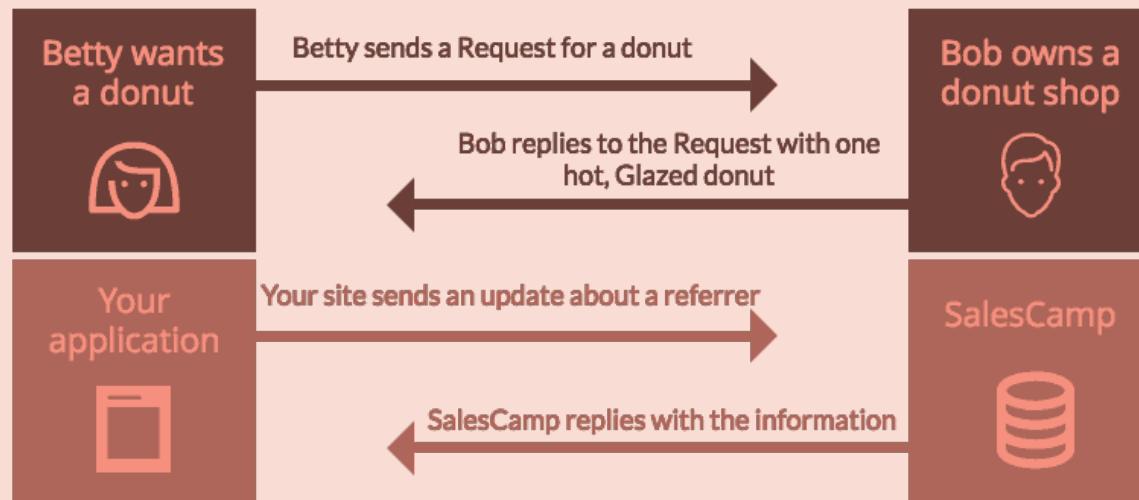
People also search for

rpi.gpio example	gpiozero read pin state
rpi.gpio vs gpiozero	gpiozero github
raspberry pi gpio command line	python-gpiozero

Step 2 – The Tweet

After you learn how to interact with one system, everything else follows similar patterns

An API Example



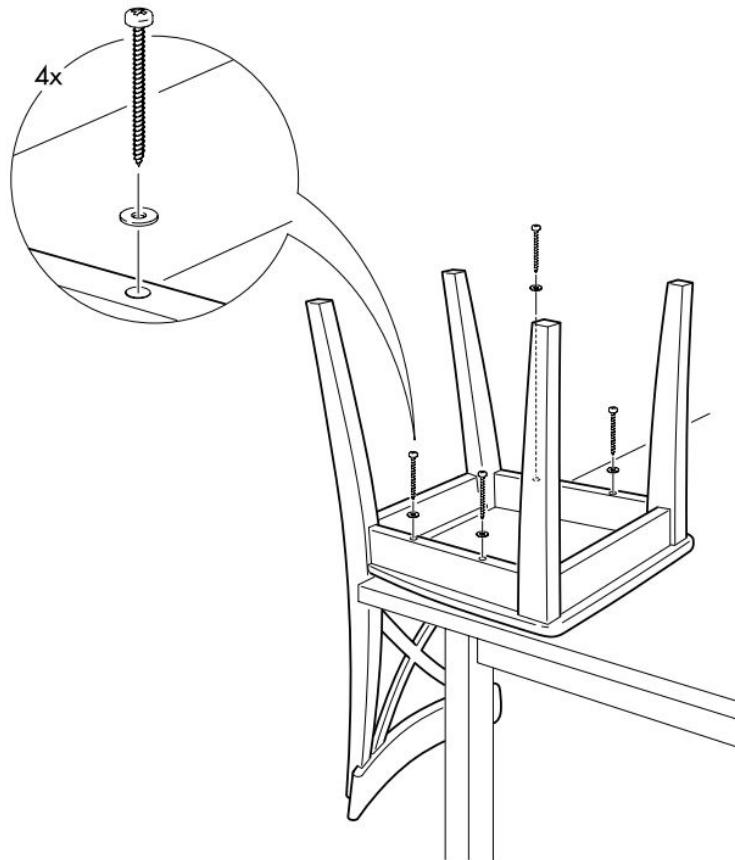
A screenshot of a Google search results page for the query "python tweet example".

Search results:

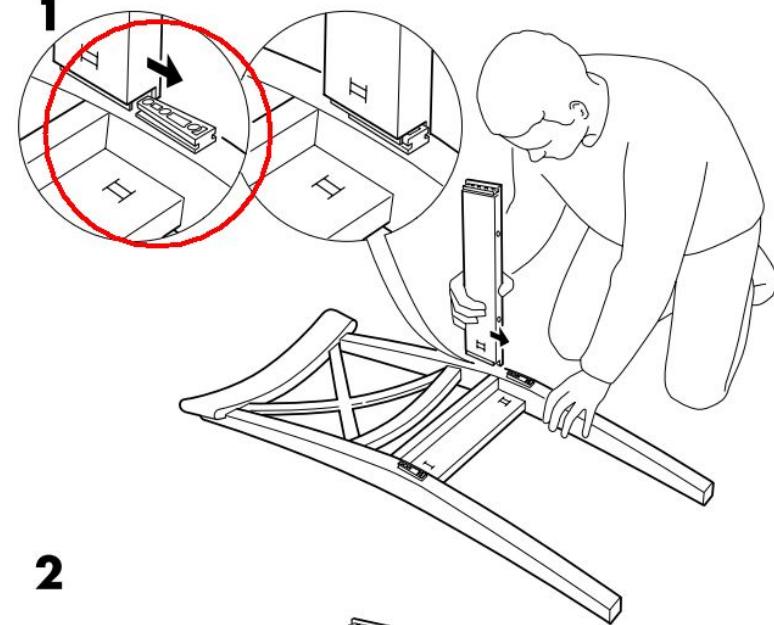
- [How to Make a Twitter Bot in Python With Tweepy – Real Python](https://realpython.com/twitter-bot-python-tweepy/)
API(auth) # Create a **tweet** api.update_status("Hello Tweepy"). This is a short **example**, but it shows the four steps common to all Tweepy programs: Import the ...
- [Automate Getting Twitter Data in Python Using Tweepy and ...](https://www.earthdatascience.org/courses/intro-to-apis/tw/)
Sep 11, 2020 - You can use the Twitter RESTful API to access **tweet** data from Twitter. ... Access **tweet** metadata including users in **Python** using Tweepy Below is an **example** of accessing the users who are sending the **tweets** related to ...
Set up Twitter App · Access Twitter API in Python · Who is Tweeting About ...

Step 3 - Bringing It Together

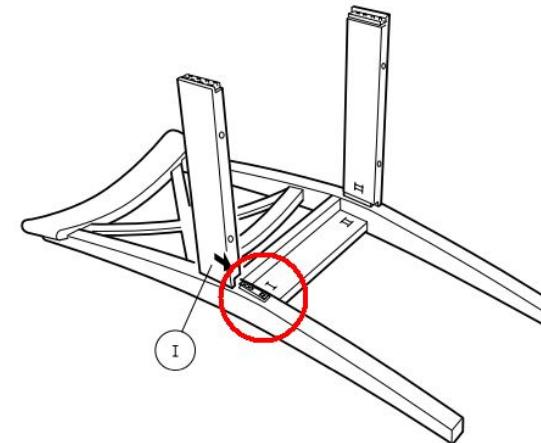
5



1



2



Extra Credit – Light Show



What If...

- We wanted multiple colors
- We wanted it to send a text message
- We wanted it to analyze video
- We wanted it to play music
- We wanted it to respond to our voice

Doing all this at once? **Yuck.**

Doing it one piece at a time? **Absolutely!**



Thanks for being my inspiration!

So... what are you going to build?

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