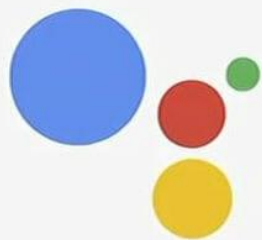


OUR MISSION

**YOU CAN LITERALLY
DO ANYTHING WITH
SOFTWARE**



"Mm-hmm."



REAL CHATBOTS

Diagnosing Cancer with AI



Neural networks are mathematical models of the biological neuron. They have the ability to approximate functional mappings from sample data (to put them mildly).

Ruby is an object oriented, functionally inspired, beautiful programming language. I used it to build the models because it's so simple to read, not because it's a practical choice for production.



Step 1: Data data data

MACHINE LEARNING

Step 2: Training

The training set is used along with a training algorithm in order to correct the neural networks classification during training. By doing so, teaching it to classify the mass as either malignant or benign. I'm training the neural network with a particle swarm optimizer, a clever global search algorithm.

Let us train the network now...

Train

Step 3: Evaluation

Once the training is complete it will show the trained networks average classification accuracy. This may vary greatly because I have not tweaked the algorithms parameters (train again if the accuracy is not sufficient).

Let us test the trained network by giving it 2 data patterns from the generalization set (the trained network never encountered these) and see if it classifies them as expected.

We expect the following unseen data to classify as Malignant.

```
17.99,10.38,122.8,1001.0,1184.0,2776.0,3001.0,1471.0,2419.0,07871.1,1095.0,9053.8,589.153.4,0.006399,0.04904,0.05373,0.0  
1587.0,0.03003,0.006193,25.38,17.33,184.6,2019.0,1622.0,6656.0,7119.0,2654.0,4601.0,1189
```

Classify example

We expect the following unseen data to classify as Benign.

```
7.76,24.54,47.92,181.0,0.05263,0.04362,0.0,0.1587,0.05884,0.3857,1.428,2.548,19.15,0.007189,0.00466,0.0,0.002676,0.002783,9.  
456,30.37,59.16,268.6,0.08996,0.06444,0.0,0.2871,0.07039
```

MACHINE LEARNING



Charlie Gerard 🇺🇸
@devdevcharlie

Charlie Gerard 🇺🇸

@devdevcharlie Keybase Chat

Software Developer / Creative Technologist @ThoughtWorks. Former creative developer @NYT in London. Passionate about #creativecoding & tinkering with hardware.

📍 Sydney (Prev. London & Paris)

charliegerard.github.io

Joined December 2009

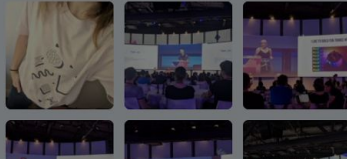
Tweet to

Message

3 Followers you know



409 Photos and videos

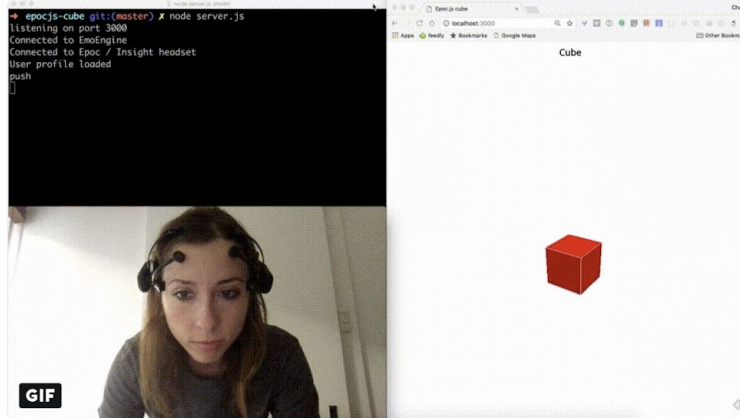


Charlie Gerard 🇺🇸
@devdevcharlie

Following



Forgot to share I FINALLY got the mental commands from the @emotiv to work in JavaScript! 🎉😄 Here's a quick example of me pushing a #threejs cube just by thinking about it! [github.com/charliegerard/...](https://github.com/charliegerard/) #javascript #Nodejs #iot #EEG



11:31 PM - 29 Jan 2018

Following



Who to follow · Refresh · View all



Daisy Smith @daisysmells

Follow



Simona Cotin @simona_c...

Follow



Suz Hinton @noopkat

Follow

Find people you know

Trends for you · Change

#Loadshedding

5,503 Tweets

#SofaSlahlane

3,921 Tweets

Saudi Arabia

366K Tweets

Eid Mubarak

109K Tweets

Trump Foundation

275K Tweets

VIRTUAL REALITY

IT MATTERS WHAT YOU BUILD

IT MATTERS HOW YOU BUILD

IT MATTERS WHY YOU BUILD

**THE MISSION OF PLATFORM45
IS TO BUILD GREAT HOLISTIC
SOFTWARE PRODUCTS FOR
BUSINESSES THAT WILL HAVE
A POSITIVE IMPACT**

- SIMON -

FIN