



Monday

Artificial Intelligence

**A Machine Learning & Deep Learning Chat Bot
Created by Afaq Anwar**

What is it?

- Monday is a Machine Learning chatbot infused with the conventional rule based chatbot in order to provide a unique “artificial intelligence”. It was planned to be a general intelligence capable of many tasks.
- Currently there are two versions, Monday is the one deployed in production, while Rennon is the Deep Learning, more advanced chatbot.

Here's how each works. NOTE - Both chatbots have some rules that add extra features!

Monday - Uses clustering and linear equations to classify questions with responses, learns as you go along.

Rennon - Encodes each user input to a mathematical value 0 - 1, runs it through the Neural Network producing an output which is then decoded.

TECHNOLOGY STACKS

Rennon



Python Version 3.6.X



cuDNN

Tensorflow 1.4 +
Nvidia CUDA Accelerated



Keras



Django Web Framework



Various API(s)
More information within
README.MD



Monday



Python Version 3.6.X



Django Web Framework

Visit This website to talk to
Monday.

<http://www.afaqanwar.io>

Development Process

Rennon

1. Gathered data to feed into a Neural Network (*Reddit Comments [Top Post / Top Reply]*)
2. Trained TWO Neural Networks, one on 1 month of data, another on 8 months of data until learning rate halted. (*Modified Google NMT Translator*)
3. Developed a simple Discord Bot to interface with the Neural Network.

Monday

1. Integrate Chatterbot with Django Requests
2. Connect Chatterbot to SQLITE DB to store user input / bot output.
3. Deploy to a web server.

SYNONYMOUS DEVELOPMENT

1. Develop a Django Project in order to interface POST / GET Requests with a Python Script.
2. Implemented AJAX Requests for JSON passthrough.
3. Design and Develop a clean User Interface.

Concepts and Technical Abilities

Concepts

- Deep Learning is extremely powerful, and is the cutting edge technology of the future.
- Rule Based Chatbots are extremely more powerful than Deep Learning / Machine Learning ones with the current open source libraries / technologies.

Technologies

- Machine Learning / Deep Learning Theory
- Tensorflow & Scikit learn libraries
- Python Programming
- Django Web Development
- JQuery
- AJAX

Skills

- Writing production level code
- Maintaining & Documenting a GitHub repository
- Deployment of Applications

Finally

Repositories related to the development of Monday / Rennon.

<https://github.com/AfaqAnwar/Monday>

<https://github.com/AfaqAnwar/Rennon>

<https://github.com/AfaqAnwar/Machine-Learning-Basics>

<https://github.com/AfaqAnwar/Python-Applications>