**What is Deep Learning…?**

Deep learning is a technology that can mimic human intelligence.

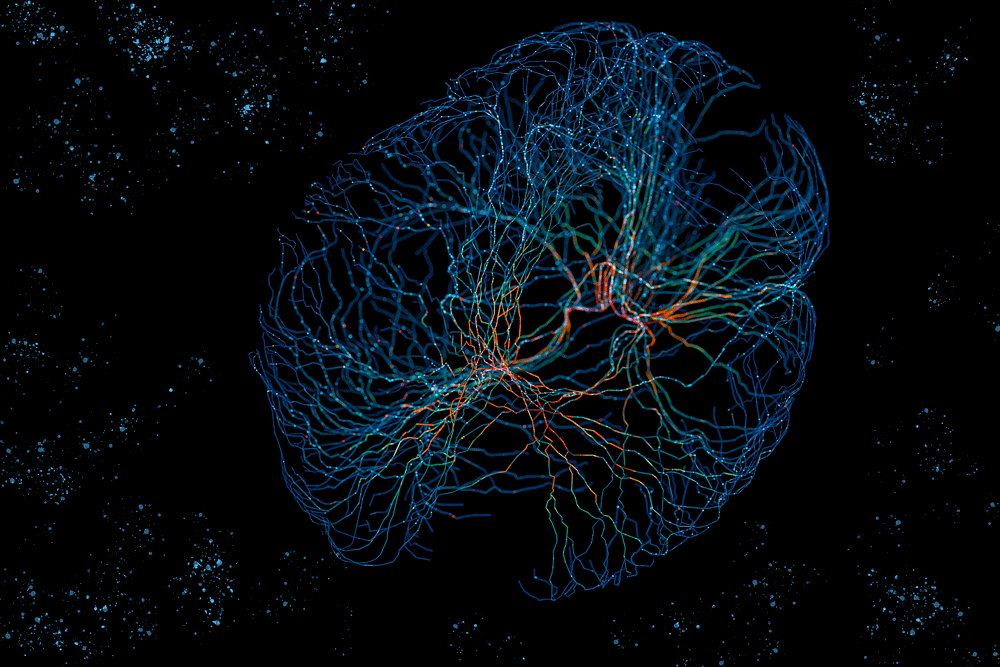
Human brain can process huge amount of data and that process is directly connected to Neural Networking.

Image that shows how Neural Network is connected in the brain.

To replicate the same amount of information as brain we use a tool called Artificial Neural Network (ANN)

Our brain can understand a specific language or human emotions and sentiments by the functionality of Neural Networking

If we need the machine to understand out language we have one more neural network that is Recurrent Neural Network(RNN)

**Recurrent Neural Network (RNN)**

* Best example for it is Natural Language processing(NLP)
* Text generation
* Machine translation
* Sentiment analysis
* Speech recognition

Our Human brain can also identify the things and images through vision.

To replicate the visionary data in the machine we use Convolution Neural Networking(CNN)

**Convolution Neural Networking (CNN)**

* Image Classification
* Object Detection
* Image Segmentation
* Facial Recognition

**Project Pipeline**

1. Data collection and Data loading
2. Image processing and image augmentation
3. Build CNN
4. Testing & Evolution

**Data collection and Data loading :**

Data will be gathered a labeled dataset of forest fire and non-fire images from open-source platforms such as Kaggle & etc…

**Image processing and image augmentation:**

Resized images to a same resolution

**Build CNN:**

Designed a CNN architecture tailored for binary image classification Fire vs. No Fire

**Testing & Evolution:**

This step help us to understand how good our model is and whether it can be trusted to work in real-life forest fire detection.