## **Neural Networks**

### **Intro**

Now you have entered some topics that we generally call slightly advanced then the normal algorithms that you have seen , the topics from here are interesting to say the least..Some parts will require resilience and patience along with good mathematical fundamentals. Try and read this material, ask your doubts and you'll set on this journey.

Good Luck.

#### Course

- Complete the following topics of this lecture for the first lecture series:\*
  - https://www.coursera.org/learn/neural-networks-deep-learning
    - Introduction
    - Neural Network Basics
    - Shallow neural Networks
    - Deep Neural Networks

If you have already completed the course, go through the blogs and advanced topics for better understanding.

# **Suggested Blogs**

- A 3 Blue One Brown video + a towards data science blog = perfect cocktail for starting something
  - https://www.youtube.com/watch?v=aircAruvnKk
  - https://towardsdatascience.com/introducing-deep-learning-and-neural-networks
    deep-learning-for-rookies-1-bd68f9cf5883
- Diving into some maths
  - $\verb| ohttps://towardsdatascience.com/understanding-neural-networks-what-how-and-why-18ec703ebd31|$
- Stanford Lectures
  - https://www.youtube.com/watch?v=i94OvYb6noo
  - o https://www.youtube.com/watch?v=gYpoJMlgyXA
- Stanford Notes
  - http://cs229.stanford.edu/notes-spring2019/cs229-notes-deep\_learning.pdf

- Wanna binge 3 blue 1 brown?
  - https://www.youtube.com/watch?v=IHZwWFHWa-w
  - https://www.youtube.com/watch?v=llg3gGewQ5U
  - o <a href="https://www.youtube.com/watch?v=llg3gGewQ5U">https://www.youtube.com/watch?v=llg3gGewQ5U</a>

# **Advanced Topics**

- <a href="https://www.youtube.com/watch?v=oID20dIrV94">https://www.youtube.com/watch?v=oID20dIrV94</a>
- https://www.youtube.com/watch?v=a v1DFjWYhY