## **Neural Networks-Journal A**

## Jordan O'Donovan - x19372016

For this initial week of the project, I have mainly been reading up on Convolutional Neural Networks and watching YouTube videos about the subject to get a better understanding of the theory and how one would attempt to code a model. I have also begun reading the book Deep Learning by Ian Goodfellow, Yoshua Bengio and Aaron Courville. I read the first three chapters of the book: Introduction, Linear Algebra, and Probability and Information Theory.

Some of the articles I read over the past week:

- https://www.analyticsvidhya.com/blog/2021/07/convolution-neural-networkbetter-understanding/
- <a href="https://machinelearningmastery.com/convolutional-layers-for-deep-learning-neural-networks/">https://machinelearningmastery.com/convolutional-layers-for-deep-learning-neural-networks/</a>
- <a href="https://machinelearningmastery.com/understanding-the-design-of-a-convolutional-neural-network/">https://machinelearningmastery.com/understanding-the-design-of-a-convolutional-neural-network/</a>
- <a href="https://www.simplilearn.com/tutorials/deep-learning-tutorial/convolutional-neural-network">https://www.simplilearn.com/tutorials/deep-learning-tutorial/convolutional-neural-network</a>
- <a href="https://towardsdatascience.com/a-comprehensive-guide-to-convolutional-neural-networks-the-eli5-way-3bd2b1164a53">https://towardsdatascience.com/a-comprehensive-guide-to-convolutional-neural-networks-the-eli5-way-3bd2b1164a53</a>

Next week I plan on studying the subject more, reading more of the book and I expect to have done a lot of if not the whole Datacamp course "Image processing with Keras".