Annotated bibliography : Inspirational Applications of AI technology to fight COVID-19

1. Arnold, K., Bordoli, L., and Kopp, J. 2006. The SWISS-MODEL workspace: A web-based environment for protein structure homology modelling. *Bioinformatics* 22, 2, 195–201.

This paper is about 3D protein structure homology modelling. Provides a web interface for this with all the required software. Served as a reference for the study of protein structure of COVID-19.

2. Chebet, T., Li, Y., Sam, N., and Liu, Y. 2019. A comparative study of fine-tuning deep learning models for plant disease identification. *Computers and Electronics in Agriculture* 161, 272–279.

A deep learning paper on plant disease detection. Found that its desired objectives can be achieved with densenet. Useful resource for accurate COVID-19 detection through image recognition and classification.

3. Chen, J., Li, K., Zhang, Z., Li, K., and Yu, P. S. 2021. A survey on applications of artificial intelligence in fighting against COVID-19. *ACM Computing Surveys* 54, 8, 158, 1–32.

This survey presents the uses, challenges, directions of artificial intelligence (AI) technologies to fight COVID-19 and galvanize researchers. Also provides the resources helpful for research.

4. Kadioglu, O., Saeed, M., Johannes, H., and Efferth, T. 2021. Identification of novel compounds against three targets of SARS-CoV-2 by virtual screening and supervised machine learning. *Computers in Biology and Medicine* 133, 104359.

Major contributor of drug development to fight against COVID pandemic. Its identification of candidate compounds resulted in this and was a great relief to the entire world.

5. Krizhevsky, A., Sutskever, I., and Hinton, G. 2012. ImageNet classification with deep convolutional neural networks. *Advances in Neural Information Processing Systems* 25, 1097–1105.

A paper on deep convolutional neural networks (CNNs) for image classification. This has great usage in many fields especially in health care that deal with image and video data with top requirements of great accuracy which can be obtained with the implementation of depth in CNN. Helpful for COVID-19 image data analysis.