- 1. Having understood the paper and processed the data, now try replicating the CNN model as described in the paper or at this link <u>Using CNN for financial time series prediction</u> (machinelearningmastery.com) shared previously. Build, train and evaluate the model.
- 2. Now think of better ways in which the CNN model can be designed for this task. This is generally an experimental process but knowing what kind of operations happen across layers and what effects do changing hyperparameters lead to would help. For deeper understanding of CNN, refer chapter 9 of the book at http://www.deeplearningbook.org. You can also look up articles and references online but essentially put in your own ideas.
- 3. Read <u>A guide to an efficient way to build neural network architectures: Hyper-parameter selection and tuning for Dense Networks using Hyperas on Fashion-MNIST | by Shashank Ramesh | Towards Data Science | Part 1 and its Part 2 focusing on CNN. Try experimenting.</u>
- 4. Organise your thoughts in a one page document. Implement your choice of CNN model with justification. Train and evaluate the model and compare its performance with original.