- 1. Download the dataset from <u>CNNpred: CNN-based stock market prediction using a diverse set of variables Mendeley Data</u> and understand it thoroughly.
- 2. Perform EDA in order to better understand the data and relationships between the variables. You can refer to Chapter 1 of <u>Practical Statistics for Data Scientists</u>.
- 3. To work with and modify data, refer to Chapter 3 of Python Data Science Handbook.
- 4. Finalise your variables and their form of values by performing Feature Engineering and Selection. Refer to <a href="Stock Prediction with ML: Feature Engineering">Stock Prediction with ML: Feature Engineering</a>— The Alpha <a href="Scientist">Scientist</a> and <a href="Stock Prediction with ML: Feature Selection">Stock Prediction with ML: Feature Selection</a>— The Alpha <a href="The Alpha Scientist">The Alpha Scientist</a>.
- 5. For a basic implementation of the paper, refer <u>Using CNN for financial time series</u> <u>prediction (machinelearningmastery.com)</u>, but you need to think of and employ your own workflow using 2, 3 & 4 and knowledge gained from earlier weeks. For now, focus on the data and transform it into the form you wish to input to 2D and 3D CNN models. Designing, building and evaluating the model will be the focus of next week.