1. **What is your project title?**

Foreign Exchange (FX) alpha generation using LSTM Neural Network Model.

1. **What is the problem that you want to solve?**

The ability to generate superior risk-adjusted return within the FX market.

1. **What deep learning methodologies do you plan to use in your project?**

We intend to use several models such as (but not limited to) LSTM and GRUs.

1. **What dataset will you use? Provide information about the dataset, and a URL for the dataset if available. Briefly describe suitability of the dataset for your problem.**

We will be using mainly G10 FX pairs. G10, short for group of ten, refers to a group of “11” of the world’s largest economies like: USA, Euro Zone, United Kingdom, Japan, Australia, etc. As a start, we focus on the 5 most liquid pairs, EUR/USD, GBP/USD, USD/JPY, AUD/USD, CAD/USD. This data is readily available, and we can download them from Yahoo Finance or any other data provider. Along with the FX rates, we would also feature engineer several variables like technical indicators – such as Bollinger band, relative strength index, etc, which can be derived from the FX rates. We believe this data is suitable for the project as it is easily executable owing to the liquid nature of the currency pairs. They are also the few heavily traded currency pairs in global markets, which would garner interest to many traders.

1. **List key references (e.g. research papers) that your project will be based on?**

<https://math.uni.lu/eml/assets/reports/2020/DiasMoreira.pdf>

<https://www.econstor.eu/bitstream/10419/237234/1/1745539263.pdf>