**CPS 2230 Project Proposal Sheet**

**Please fill the following information**

**Submission deadline:** Monday  April 25, 11:59 pm, one submission per group

**Project area:**

Time Series, Long Short-Term Memory (LSTM).

**Project description:**

So far, human economic activities are mainly carried out under natural conditions, especially agriculture, which sustains human life and is greatly constrained by climatic conditions, and the development of regional economies and industries, such as food, electrical appliances, clothing, medicine, transportation and other fields are also closely related to meteorological information. Therefore, weather forecasting is crucial.

Time series data is a pattern and trend over time that allows us to track, monitor, or measure the development and changes of these events, and weather is the most typical time series data. Therefore, we will obtain the weather data of Wenzhou over the years from the official website of China Meteorological Administration and perform time series analysis after data cleaning on the raw data. Due to the unique design structure, LSTM is suitable for processing and predicting important events with very long intervals and delays in the time series. Therefore, based on the analyzed results, we will forecast the weather conditions of Wenzhou in the coming days by LSTM.

**Group members:**

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| **Last Name** | **First Name** | **Email** | **ID** |
| Liu | Yinhao | liuyinh@kean.edu | 1129479 |
| Lu | Changjie | lucha@kean.edu | 1129503 |