



# Time Series Prediction with Deep Learning

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# Dataset

- DATE RANGE: **2009 - 2017**
- NUMBER OF ROWS: **420,551**
- NUMBER OF COLUMNS (FEATURES): **13**
- SIZE OF DATA: **43.16 MB**
- FEATURES TYPE: **NUMERIC**
- PREDICTED COLUMN: **TEMPERATURE IN CELSIUS DEGREES**
- METHOD: **DEEP LEARNING**



# Objective & Reasons



- Countless features for predicting weather, deep learning could be a **good choice for large dataset with many features**
- Weather data is **common in industry**
- **Real time forecasting** heavily rely on the weather feature
- **Good practice**

# Things Need to Considered:



- Time Series has **seasonality**
- When splitting the data to train/test set, or cross-validation, **cannot** random shuffle
- This is a **regression** problem
- Need to parse **datetime** feature



*Thank you*