THE UNIVERSITY OF CHICAGO

Department of Statistics

MASTER'S THESIS PRESENTATION

MYUNGIN KIM

Department of Statistics
The University of Chicago

Recurrent Neural Networks and Time Series Prediction on USD/KRW Exchange Rate

FRIDAY, June 30, 2017, at 1:00 PM
Jones 304, 5747 S. Ellis Avenue

ABSTRACT

This paper explores three different time series prediction models: ARIMA, basic RNN, and encoder/decoder RNN. We present the limitations of ARIMA model for predicting USD/KRW exchange rate and the relative advantages of using RNN or encoder/decoder RNN for time series prediction. We discuss the prediction performances of ARIMA and RNN by comparing prediction intervals and prediction errors (RMSE) of these models. In addition to prediction results, training details of two different RNN models will also be discussed.
