W271-2 – Spring 2016 – **HW 8**

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Contents

Exercises

Exercise 1

Build an univariate linear time series model (i.e AR, MA, and ARMA models) using the series in `hw08_series.csv`.

- **Use all the techniques that have been taught so far to build the model, including date examination, data visualization, etc.**
- **All the steps to support your final model need to be shown clearly.**
- **Show that the assumptions underlying the model are valid.**
- **Which model seems most reasonable in terms of satisfying the model's underling assumption?**
- **Evaluate the model performance (both in- and out-of-sample)**
- **Pick your "best" models and conduct a 12-step ahead forecast. Discuss your results. Discuss the choice of your metrics to measure "best".