STAT 485/685 Lecture 17
Fall 2017
9 November 2017

- I discussed the *extended autocorrelation function* as a tool for identifying p and q in an ARMA(p, q) model.
- I emphasized the fact that model identification procedures have non-zero error rates.
- Then I spent quite a bit of time on `R` code.
- I showed how model selection sometimes *over-fits* (meaning getting p and q too big and sometimes just getting it wrong, as for instance by using say MA(3) instead of the correct AR(1).
- I used `ar`, `arima`, and `auto.arima` to fit ARIMA models.
- I introduced the general idea of an *information criterion* as a way of selecting the model by a formal, rather than graphical, method.
- We looked at a lot of model output.
- I wanted you to pay attention to the estimates and SEs and see that sometimes a mean is fitted and sometimes not.
- Significant correlations with small lags are often more likely to be real than a few significant correlations with large lags.
- We saw that all the methods sometimes selected incorrect models.
- R Code.
- Handwritten slides.