An Incomplete List of Resources That Helped Me Through Graduate School

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04/06/2021

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Professional development

Early in my graduate career, a faculty member recommended me to add the book *The professor is in (TPII)* to my reading list. TPII offers helpful insight on how to navigate the academic career from step one - building strong records as a graduate student. TPII talks about how to approach and balance the important things in graduate school - grants, publications, conferences, other research activities, and teaching, etc. With the great mentoring that I received from my amazing grad advisor, other faculty mentors, and fellow graduate students, I still read about new opportunities in TPII that I not heard about.

For example, TPII encouraged senior graduate students to consider chairing a symposium at a conference. I have not thought about doing that before, but it sounds like good advice and a fun challenge, so I followed through. The experience of chairing a symposium turned out to be incredibly beneficial for my professional growth.

Quantitative methods self-education

Quantitative research methodology is a big part of lots of students' graduate training in HDFS. Quantitative methods are marketable both in academia and in the industry. Good statistical courses offered in various disciplines can help a ton. But a lot of times advanced statistical courses are offered only every two years. When you need a particular method to address a question close to your heart, you cannot always afford to wait until that course is offered. However, learning an unfamiliar quantitative method on your own may be nerve-wracking. Here are a few sites and books that I found to be most helpful in my learning process:

- Tutorials written by UCLA researchers (basic methods) https://stats.idre.ucla.edu/other/mult-pkg/seminars/#Stata
- Tutorials written by Penn State researchers (advanced methods) https://quantdev.ssri.psu.edu/tutorials
- R for data science https://r4ds.had.co.nz (for those who would like to learn R systematically and use R more efficiently)

Moreover, I have found Coursera courses to be helpful when I tried to learn a completely new method for a project. For example, I have taken *A Crash Course in Causality: Inferring Causal Effects from Observational Data* (https://www.coursera.org/learn/crash-course-in-causality) when I tried to learn propensity score matching and weighting methods for one of the projects that I wanted to work with. Most of the statistical courses on Coursera are carefully designed and easy to follow.

In some cases, you know the basic ideas of the method, and you know how to use that method for the most part. But you can still run into various kinds of issues when you apply the methods to your real data. Before I turn to textbooks (which sometimes contain outdated information) or consulting experts, I always try my luck with Google first. Nine out of ten times, someone else has had the same problem and the other someone else has posted the exact answer that I need.