How to thrive in grad school
Session 5: Communicating your work

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Roadmap and expectations

We will cover

- Session 1: Basics
- Session 2: LaTeX
- Session 3: How to learn from previous research
- Session 4: Starting your own research
- **Session 5: Communicating your research to others**
- Session 7: Possible career paths

Communicating your research to others

- Basic Communications tips
    - Talks, papers, and collaborators
- Submitting papers for publication
- Miscellanea

Introductions

What is an interesting (non-academic) youtube tutorial you've watched recently?

Communicating research

- Papers
  - Details of the work
  - Preserved for posterity
  - Just start writing, then refine later
  - Helpful resources on writing:
    - Patrick Heagerty, Washington Biostat
    - Brad Efron, Stanford Stat
- Talks
  - Spark interest and give basic ideas
  - Advertise your work
  - Impressing the audience is not the main goal
  - Helpful resources on talks:
    - Stephanie Weirich, Penn CIS
    - Paul Edwards, Michigan Information School
    - Jonathan Shewchuk, Berkeley EECS
- Progress reports
  - Communicate work that has been done to collaborators

Progress reports

- A good progress report helps optimize the time you have with your collaborators
- Gives a record of what has been tried
- Keep some repository of progress
- Main sections
  - What are things you tried or accomplished in the last period?
  - What are things that you are currently trying?
  - What are the difficulties/roadblocks?
  - What is upcoming?
- Potential template

Submitting a paper

When selecting a venue:

- Define a target audience
- Honestly assess the the "quality" of the paper
- Are there AE's who would be interested in your work?
- How quickly do you want the review process to go?

Potential Venues

- Top 4 statistics journals: Annals of Statistics, Journal of the American Statistical Association (T&M), Journal of the Royal Statistical Society (B), Biometrika
- Theory focused journals: Bernoulli, Electronic Journal of Statistics
- Applications focused journals: JRSS C, JASA (A&C), Annals of Applied Statistics
- Machine Learning: Journal of Machine Learning Research, NeurIPS, ICML, UAI, AISTATS
- Others: Bayesian Analysis, Biometrics, Journal of Computational and Graphical Statistics, Journal of Multivariate Analysis, Scandinavian Journal of Statistics, Sankhya, Statistica Sinica, Statistical Science, Technometrics, etc.

Review Process

When submitting to Journals

- Paper gets assigned to an Associate Editor (AE)
- AE selects multiple reviewers (typically post-docs or professors) to read and provide comments on paper
- Reviewers provide detailed comments, and also recommend response
    - Reject
    - Reject, but with encouragement to resubmit
    - Major Revision Requested
    - Minor Revision Requested
    - Accept
- AE reads the reviewer comments and makes determination on paper decision
- Authors take reviews and can decide to make revisions and resubmit or go to submit to another journal
- Often takes multiple rounds of back and forth, each round might be 6 months+ depending on journal

Review Process

When submitting to conferences

- Paper gets assigned to an Associate Chair (AC)
- AC selects multiple reviewers (typically senior grad students, post-docs or professors) to read and provide comments on paper
- Reviewers provide detailed comments, and also recommend response
  - Numerical score (often 1-7)
  - Level of confidence
- Authors see reviews and have a chance to respond (usually within 1 week)
- Reviewers discuss again, and give final recommendation
- AC's and Senior AC's then decide on acceptances
- Typically will know result in a few months

Miscellania

- Build a website: Github Academic page
- CV: Latex Template

Winter is coming...

- Get a substantial winter coat and appropriate footwear
- Get outside when the sun is out (take a walk at lunchtime or during the day)
- Stay active (indoors and outdoors)
  - Cornell Outdoor Education Gear Rentals
- Light therapy: Mayo Clinic
- Make routine plans with others