Publishing Your Research

Meredith Ringel Morris
Google Research

Lydia Tapia
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Meredith Ringel Morris

• PhD in CS from Stanford in 2006 (focus = HCI)
• 14+ years at Microsoft Research, now Google
• Affiliate Prof. at UW CSE & iSchool
• ACM Fellow, SIGCHI Academy
• Program Chair for CHI, CSCW, ASSETS, etc.
• TOCHI Editorial Board
• 100+ papers including several Best Paper and Lasting Impact Awards
Lydia Tapia

• Grad Cohort, 2004?
• Ph.D. 2009, Texas A&M U.
• Postdoc 2009-2011, U. Texas Austin
• Assistant Professor 2011-2017, U. of New Mexico
• Associate Professor 2017-??, U. of New Mexico
• Chair of Computer Science, 2022, U. of New Mexico

• Interdisciplinary research in high-dimensional robotics
  — Robotics work with ECE and ME
    • Robotics venues
    • Control venues
  — Computational biology work with UNM Medical School, Biology, and Chemical Engineering
    • CS computational biology venues
    • Biology venues

• About my publication record
  — Pre- PhD 10 papers (2 papers/year)
  — Pre-tenure Faculty 34 papers (over 5 papers/year)
  — Post-tenure Faculty 32 papers (over 6 papers/year)
  — Best Paper Award, top conference for area
The Publishing Process:

*The Why of Writing Papers*
The “Writing Bug”

It feels good:
- to share what you’ve done
- others to be interested
- to say how you’ve advanced state of the art!

It’s addictive!
Feels Good... Keep Doing It?!  

Yes and No....  

- Quality!  
- Quantity varies by area  
- Citations matter as career progresses  
- Venue matters
Avenues for Publication

Examples from Robotics

IEEE Transactions on Robotics Journal

IEEE International Conference on Robotics and Automation

Workshop on Machine Learning in Planning and Control

Workshop on the Algorithmic Foundations of Robotics
Avenues for Publication

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Additional
Workshop Abstracts
Doctoral Consortium
Conference/Workshop Posters

Other Outlets
Thesis
Software, patents, books, data repositories
Social media: blogs, Twitter, YouTube

feedback
prestige
field recognition
visibility
feedback
The Writing Process:  
*The How of Writing a Paper*
Writing Resources

• writing courses at your university
• reference books (Strunk & White)
• professional or pro bono proofreaders
  • Can you or your advisor apply for funding for this type of resource?
  • Free resources often include paper mentoring programs offered by conferences & professional societies
Know Your Audience

• Read lots of papers from the target venue
• Attend the venue (if a conference)
• Review for the venue if possible (ask your advisor to recommend you for this)
• Program Committee meetings
  • Senior students may get invited if their advisor pulls strings
  • You may be able to observe as a student volunteer
Start Early

• The more iterations, the stronger the paper
• Set an internal deadline with your advisor
• When is a draft “advisor ready”? Perfection isn’t expected
• Leave ample time for advisor and peer feedback, making submissions accessible, creation of video or other supplementary materials
Communicate with Co-Authors

• Agree on deadlines (for outline, drafts of sections, full draft, feedback, etc.)
• Agree on division of labor
• Be explicit about authorship (who & in what order)
  • For interdisciplinary work, be aware that different communities have different customs
Make an Outline

• Iterate and agree on the outline with your advisor before you start writing

• You don’t need to fill in the sections in order!
  • Sections I often find easier to write first: Related Work, Methods, Results
  • Sections I often save until later: Introduction, Discussion
Revise, Revise, Revise

• Easier to revise an outline than carefully crafted text

• Can save the Introduction to later, but agree on the major points: problem being addressed, weaknesses of previous work, contributions of this paper, ensuing sections

• Nail down terminology

• Create figures to be included
But, things might change

- Writing a paper sometimes helps you see the work in a new light
  - Need to be explicit about underlying assumptions
  - Often, need to explain work to non-experts in this area
  - Need to flesh out details that “seemed” clear
- Might lead to changes in the outline, the figures, even the authorship
About Deadlines

• What to do if the submission site crashes near the deadline...
• When is it OK to request an extension?
Metadata Matters

• Abstract Pre-Registration
• Keywords = Reviewer Matching
• What name should you publish under?
Rebuttals

• Sleep on it!
• What if your scores are very low or high?
• Prioritize reviewers’ comments & group by themes
• As with all writing, start early, get feedback, iterate
• More at aka.ms/rebuttals
Things to Avoid

• Plagiarism (including self-plagiarism)
• Dual submissions
• All-nighters (start early, iterate often!)
• Complaining about reviews on social media
• Submitting without knowledge of advisor/co-authors
Questions?