

Tips for Developing your Brand and Research Career

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- Selecting research topics
- Participating in International Conferences
- Organizing International Workshops
- Being in Journal Editorial Boards
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- Publishing



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Communication Response

- 4 types of responses
 - Yes, I absolutely agree
 - Yes, I sort of agree
 - That may be so
 - No, are you kidding? That has not been my experience!



How I learned?

- I learned hard way!
- I wish I knew earlier!



My Experience

- Professor, Drexel University, since 2000
- PhD Program Director in Informatics, College of Computing & Informatics
- Deputy Director, NSF Research Center on Visual & Decision Informatics
- Affiliated Professor, CS Dept, KAIST, Korea
- (Director, Drexel Data Science Institute)
- ACM Distinguished Scientist, 2013
- ER Fellow, 2012
- ER Steering Committee Chair, 2010-2012
- Won 4 teaching awards at Drexel (Linkback Distinguished, Most Outstanding Instructor, Teaching Excellence, Exemplary Teaching Awards)



My Experience

- Published 190+ refereed papers
- Won 1 best paper award the *Best Paper Award* of in the 2004 IEEE CIBCB 2004 and one best paper nominated (2004, IEEE/ACM Web Intelligence Conference)
- Won 14 Awards at annual Drexel Research Competitions
- Chaired Conference & Workshops over 22 times (ER, CIKM, DOLAP, FP-UML, MoBID, DAWAK, DESRIST).
- Found ACM DOLAP workshop and Chaired 1998-2014.
- Offered tutorials at conferences, 3 times (CIKM98, ICCS99, ER00)
- Conf. steering committee (CIKM, ER, DOLAP, ADFSL, BigComp)
- Co-Editor-in-Chief (JCSE)
- Associate Editor or Editorial Boards (DKE, JDM, IJEER, IJDS) & Guest editors (DKE, DSS, JDM, IS, IJDWM)



Essential Skills to Learn as a *junior* doctoral student

- How to read (review) papers?
- How to select a research topic?
- How to carry on a research?
- How to write a dissertation proposal?
- How to write a dissertation?
- How to manage: Selecting Advisor, committee, publication
- How to write a paper?
- How to present a paper?
- How to review a research proposal?
- Take as many courses as possible
- Attend as many seminars/job talks as possible
- **Time management**
- **Maintaining your Health**



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Essential Skills to Learn as a *senior* doctoral student

- **Learn how to write a research proposal**
- **Find a life-long mentor in your research career**
- **Establishing your own brand!**
 - Know major journals and conferences in your research areas
 - Create/maintain/join professional networks
- **Teaching experience**
 - Have a teaching experience
- **Job search**
 - Prepare CV, Research statement, Teaching statement
 - How to prepare /perform a job talk?
 - How to prepare for a phone interview?
 - How to do an interview at a conference?
- **Submit a journal paper before graduation**
 - Creating two papers from a dissertation
- **Decide Career path:** Academia/Industry



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Selecting a Research/Dissertation Topic

- **Pick up a promising topic**
 - High impacts
 - Technical significance
 - Applicable to real-world applications
- **Practicality: Is that for me?**
 - Doable? Do I have the right background?
 - Interest? Do I truly enjoy the topic?
 - Long-term? Can I work on the topic in a long term basis?



Learn to Publish

- **Start publishing early**
 - Participate in professors' existing projects
 - Begin to publish in moderate venues first
 - Poster -> Workshop -> Conference -> Journal
 - Learn how to *write* papers
 - Write a 2-page summary first (The problem, Why is it important/difficult? What others did? Your approach? Contributions)
 - Write a reviewer-friendly paper; write for readers, not for yourself
 - Get it reviewed before submission
- **Publish regularly**
 - Collaborate



Conferences

- Conference organization (GC, PC, other chairs)
- PC member
 - How to be invited
 - Submit fair/constructive reviews
- Session chair
 - Roles
 - How to be a good session chair?
- Publishing in conferences/workshops
- Presenting at conferences
- Things to do at conferences
 - Meet targeted people



Conferences

- PC member
 - How to be invited
 - Contact PC chairs
 - By recommendation
 - Get invited
 - Reviewing papers
 - Submit on time
 - Submit informative/detailed reviews
 - Be fair
 - Be careful with student reviews (never submit w/o reviews)
 - Submit constructive reviews
 - Learn how to review papers!
 - You don't always have to read the whole papers



Conferences

- **Session chair**
 - How to be a good session chair
 - Read papers in advance
 - Prepare at least two questions for each paper
 - Start on time and finish on time
 - Control questions and questioners
 - Summarize important points and rephrase them
 - Praise speaker's ideas or presentation
 - Come up with your own questions – at least two
 - Completeness
 - Soundness
 - Applications
 - Comparison with others
 - Future work



Conferences

- **Publishing in conferences/workshops**
 - Aim high
 - Know where to publish
 - Publish progressively
 - Select a good conference in your research area and go every year
 - Focus one or two major conferences and communities



Workshops

- **Benefits of organizing a workshop**
 - Develop a new area
 - Create/Expand network by inviting PC members
 - Read others' papers
 - Learn review techniques
 - Invite keynote speakers
- **Proposing a workshop**
 - Invite a senior as a co-chair
 - Include a well-known keynote speaker
- **Workshop topics**
 - Hot, promising, growing areas



Workshops

- Creating a workshop program
- Serving as a workshop chair
 - Opening
 - Session chairs
 - Workshop reports
 - Creating a special issue for a journal



Submitting Your Paper to Journals

- Do not submit immature papers
 - Contents (e.g., no case study or experiments; clear significances)
 - Syntactic requirements (page limit, formatting, citation style, professional graphics)
- Know editors' preference
- Write a good informative cover letter
- Submit to a journal special issue
 - Usually fast turn-around time
- Be a reviewer of the journal you want to publish



Tutorials at Conference

- Present your (students') dissertation at a conference
 - Survey
 - Main parts
(taxonomy/approaches/strengths/weaknesses)
 - Suggest research topics



Career Development After Graduation

- Publish a survey paper from your dissertation
- Ensure your major journal paper from your dissertation to be published
- Publish regularly
- Join program committees of international conferences/workshops
- Organize a workshop/track
- Get invited in NSF panel reviews
- Know funding agencies and program managers in your areas
- Keep submitting funding proposals
- Get invited to be editorial boards of journals
- Regularly attend/participate in the key conference in your research areas and get to know the key people
- Learn how to teach/present
- ***Learn how to earn tenure!***



Establishing Your Brand

- Pick up long-term promising research topic that could have impacts-socially or scientifically
- Create a research lab under that name
- Co-work with established researchers in your areas
 - Choose the right co-workers
 - Create strategic relationships with them for funding, publication, and work
- Organize an international workshop in the research topic chosen (with an established researcher as a co-chair)
- Deliver tutorials at international conferences
- Publish columns at major public newspaper or write in a blog
- Watch out new areas every few years and expand your scope- Learn from other disciplines



Conclusion

- Aggressively pursue your international activities in your *key areas*
- Organize a workshop
- Offer a tutorial
- Expand your network at conferences
- Attend major conferences in your areas -regularly
- Make most of your time at conferences/during post-doc/sabbatical
- Work on impact-oriented topics



Conclusion

Apply extreme positivism!

Follow your passion!

Ask many questions!



Hope we can be proud of you, soon!



Q/A

- **Questions/Comments?**

