

Student Workshop 2011

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A few tips I wish I had
before I met my advisors

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Expert-sourced Wisdom (I)

- “Run way!”
- “I wish I knew my advisor would drive me crazy”
- “Working with one person for five years is a long time”

Before I applied for grad school

- First programmed in Pascal, and then in C
- Used an illegal copy of William Stallings' Data and Computer Communications (1st Ed.) as textbook
- Developed PC-based X-terminals for 2yrs
- Read and learned about grad programs in hard-copy annual reports

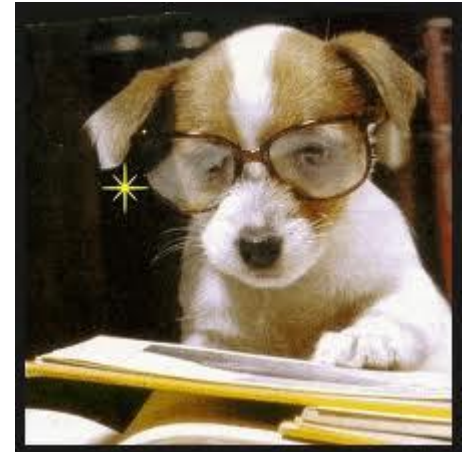
And ...

- Never heard about a thesaurus
- Never had a course on writing
- Never had a course on *technical* writing *in English*
- Can't remember if I ever met 1:1 with MS advisor for technical discussion
- Never met anyone who knew my to-be advisors in person



When I started grad school

- I had scholarship from Korean government
- I meant to study hard
- I meant to do great research



But ...

- I hadn't thought much on how
- I should have asked around on how
- This talk is about me telling myself of 20 years ago about how

Tip #1 Articulate Assumptions
You Make About Your Advisor and
Get Rid of Them

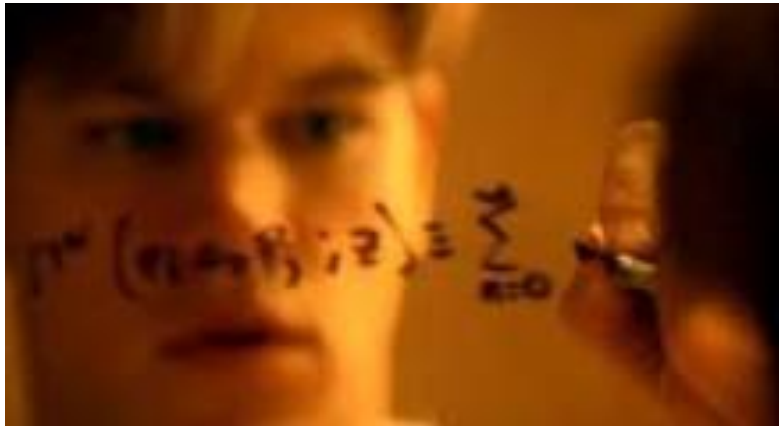
#A1 My advisor is omniscient (I)

- He probably knows
 - I could program decently
 - My spoken English is passable
 - I work most of the time (ahem!) *hard*
- But doesn't know / can't remember exactly
 - What languages I could program in
 - What papers I read last week and what I thought of them
 - Where I was stuck in my research the week before

Elevator pitch not only for a Job



Keep him up-to-date!



#A2 My advisor is omniscient (II)

- She knows what research problem is for me
 - She has read and remembers my statement of purpose
 - She knows about funding initiatives
 - She has ideas she would like to work on
- But she doesn't know if I would actually want to work on it

Expose yourself as much as you can!

- Ask questions on all things technical but you don't know about or haven't heard about and answer them
- Try to answer questions your advisor asks
They ask because they don't have answers!!
- Get all colleagues around you involved in this Q&A dialogue

From my personal experience

- Help students pick up methodological approaches to good research
- Leave them with freedom on research topics

Then I go find funding after preliminary results...



"Hey, that's just one omniscient guy's opinion."

#A3 My advisor is a superman!

- He would have read my email sent out at midnight and replied by 8am next morning
- He would work with me on my paper as hard as I
- He could write a recommendation letter in a day

But ...

- You are 1 of N students
- Your paper is 1 of M papers
- He reviews P papers a year
- He teaches Q courses a year
- He attends X committee meetings a week
- He travels Y times a year

Do the math!!! He only has $[(365 - 14 - 52 \times 2 - Y \times 5) \times (8 - X/5) - 4 \times P - 3 \times Q \times 16] / (N \times M \times 52)$ hours / week for you.

N=5, M=10, P=20, Q=2, X=5, Y=4 Answer = 0.54

Then ...

- You realize how busy your advisor is
- You become so understanding that you don't have the heart to ask him for time

Think hard about what you want from him

- News on new research initiatives?
- Feedback on your research progress?
- Opinion on related work?
- Comments on your writing?

Turn every session to self-Q&A

- Instead of “What do you think about XXX?” ask “I think XXX should work because of A, B, and C in decreasing order of importance. So I plan to start with A. What do you think?”

Prioritize what he can do for you

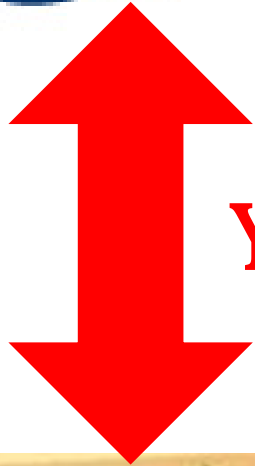


- “I would appreciate feedback on the camera-ready version by this Friday”
- “Your schedule this week looks full, but can you squeeze in a half-hour meeting on Wed afternoon?”
- “The deadline for travel grant application is in two weeks. Thanks!”

#A4 My advisor could sub
as an English teacher



TOEFL. GRE.



You are somewhere here



Get feedback on your writing *from all possible sources*

- Get feedback from native-speaker friends
 - On any writing with a theme (e.g., emails)



- Take courses on technical writing
 - Technical writing courses
 - On-campus language centers
 - Community college courses
 - Online writing courses

Leave your advisor to be what they are good at: *editor* of your work

- Help you structure a paper
- Check if all relevant related work is accounted for
- Help you with the flow of writing
- Help you choose a venue for publication
 - Slightly different from traditional role of editor because an editor comes from a publisher

#A5 My advisor could sub as a speech coach

You wanna be like




You wanna hire



Instead you torment your poor advisors

Some ideas in decreasing order of adoptability

- Give up on improving your spoken English in a few months
 - Instead, spend time on your slides
 - Script your talk
 - Every punchline you'd like to deliver, use pop-up text boxes
- Try  *Siri*
- Become a chatty person

Tip #2 Find someone with
more knowledge
on your advisor's quirks!

Who knows her better than you?





Jim Kurose



Don Towsley

- Not only wonderful people but great advisors
- They knew what I needed when I needed it



- They were almost omniscient
- They were very close to being supermen
- They helped me so much with my writing
- And with my presentations
- And I had friends who helped me to decipher their comments

Not all are as lucky as I



Neither are some more
to come



This talk is for them!

Expert-sourced Wisdom (II)

- “It should be interesting to your students.”
- “I’d give a different talk if the audience is mostly Asian.”
- “Have a meeting in a room without a laptop or a phone”

Acknowledgements

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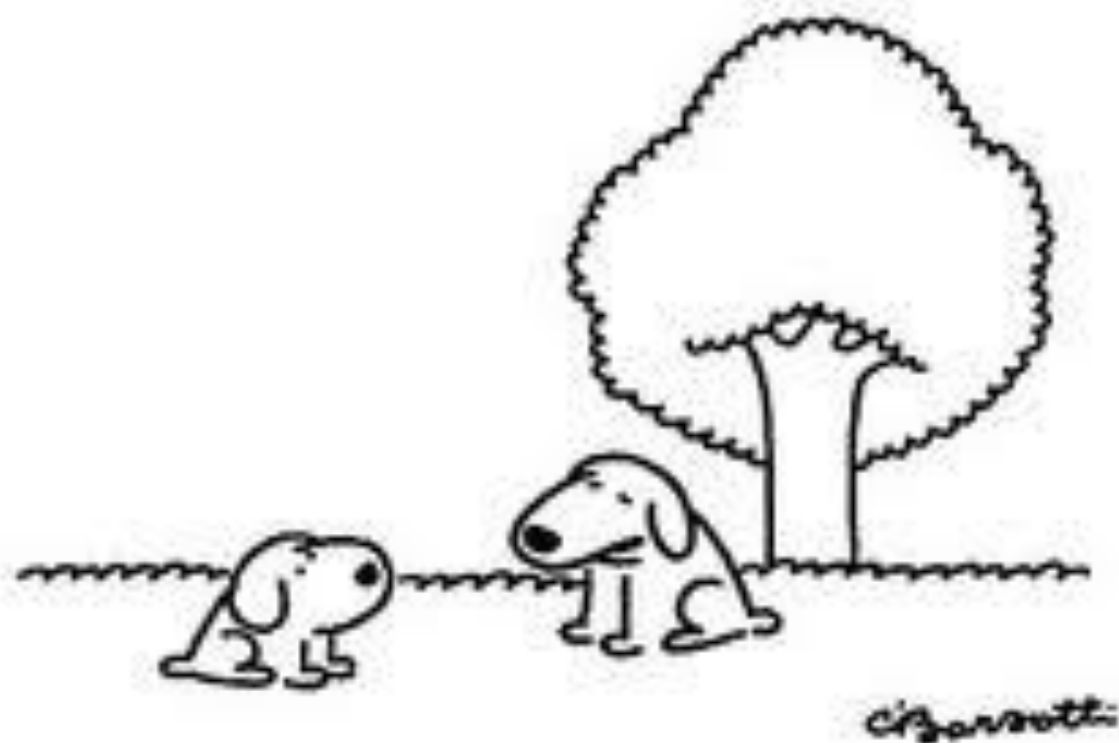
Mark Allman

Jennifer Rexford

Richard Mortier

Craig Partridge

James Sterbenz



*"My advice is to learn all the tricks
you can while you're young."*