Being an Effective UTCS Graduate Student

John Thywissen • 28 Aug 2017
Begin at the End:
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Goal: Published Research
Idealized research process

Brilliant Insight

Work to Prove it

Research Publication
Idealized picture is dangerously misleading

- Not novel
- Infeasible
- Unpublishable
Research is a stochastic process
Listen: The World is Streaming Research Ideas at You

- Go to department talks.
- Join a reading group. Can’t find a good one? Start one.
  - GRACS reading group list: http://wiki.cs.utexas.edu/gracs/ReadingGroups
- Participate in workshops.
- Skim though proceedings and magazines from ACM/IEEE/SIAM…
Foundations for Effectiveness: Six parts

1. Self-discipline
2. Skill and proficiency in processes and tools:
   - Task and time management
   - Academic writing and speaking
   - Development tools (for your area)
3. Self-awareness
4. Knowledge in area
5. Collaboration with fellow students and faculty
6. Effective use of group, UTCS and University resources
Time Management

Control your time

Eliminate distractions:
This requires both self-discipline and self-awareness: Decide: It’s time to work, or it’s time to play. Both are legitimate, but decide consciously.

Don’t waste others’ time

Be slightly early:
“*If you’re on time, you’re late.*”

Track your time

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Task Management

Get (or build) a process to track tasks.

Notes on scraps of paper will *not* work.

Leaving messages in your inbox will *not* work.

“Just remembering” will *not* work.

Your task management process:

– Must be **reliable** enough that you can **trust** it, and

– Must be **simple** enough that you use it **everyday**, and

– Must be **scalable** enough to handle **multiple** simultaneous **projects**.

Suggestion: the GTD system by David Allen:

http://gettingthingsdone.com
Academic Writing and Speaking

- There are many books and talks on academic writing and speaking.
- Get a few, read them, and then *practice*. This is a skill, so you must *do it* in order to learn it.
- Take opportunities to write and speak. Ask for feedback from the readers/audience.
- *Tip*: Track everything you’ve read in a citation manager (examples: Zotero or BibDesk).

Suggestions for books on writing:
- *The Craft of Research*
- *Turabian*
- *Style: Lessons in Clarity and Grace*
  ISBN 0-321-89868-0 $16
Collaboration with fellow students and faculty

- Again, join (or start) a reading group in your interest area.

- Go to research group meetings.
  - Use as speaking practice venue.

- Faculty meetings: conference course/advisor meeting:
  Roughly 1 hour/week.
  - Agree on goals for the semester.
  - Use as a writing practice venue.
Being an Effective UTCS Graduate Student

Begin at the End

– Goal: Research publications
– Participate in research projects.
– Now. Not “real soon”.
– Do not wait for the perfect research topic.
– Research is a stochastic process, so multiple “trials” of potential projects are essential.
– View classes as input for your research projects.
– Talk and listen: advisor, fellow students, workshops, other researchers, etc.

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