Twitter Thread by Philipp Leitner

Philipp Leitner
@xLeitix

Starting PhD student pro tips:

- Keep a backlog of “small ideas” that you don’t find the time to work on. Soon enough you will be asked to supervise undergrad students in some capacity, and these ideas will be exactly what they need to get started.

- In the first two years worry about learning and getting settled in your research field. In year 3+ you can worry about churning out papers (but that’s much easier of you have a good understanding of the field and its methods).

- Believe your advisor on strategy matters, believe in yourself when it comes to details and results (we have good intuition about what’s interesting and important, but only you know what you have actually done and what it means).

- Talk to other students as often as you can. No, they likely won’t know how to solve the specific issue you are currently having, but over time you will learn more from your colleagues than from your advisor.

- Relatedly, other people (your advisor, other profs, other students, reviewers) are neither idiots nor almighty gods of knowledge. They will have insights, but some of the things they tell you will turn out to be garbage.

- Always remember that they laughed at Columbus, they laughed at Fulton, they laughed at the Wright Brothers. But they also laughed at Bozo the Clown.

(read: if people consistently don’t buy your idea, consider that they may be correct)

- When assessing if your paper is good enough for a specific venue, don’t take the worst paper you can find as baseline. Peer review isn’t nearly that fair, and standards increase over the years

(but probably submit anyway - better to aim high and fail than to aim low)

- The earlier you learn to see rejection as a temporary setback the better. Your stuff will get rejected, and often for unfair reasons. But very rarely does actual research not get accepted anywhere.

(P.S.: still working on this one myself - I may get there in retirement)

- The one skill that every PhD student in applied CS needs to master is writing in English. Weaknesses in basically anything else can be mitigated by selecting a research topic that plays to your strengths, but if you can’t write it up well then nothing else really matters.

- The best way to improve your writing (besides writing a lot) is reading many, many good papers. Observe not only what results they report, but also how they construct their story and how they structure and build paragraphs, and what plots they use. Copy liberally what you like.