My experiences on applying to EECS PhD programs

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Feb 14, 2021

I applied to several PhD programs in 2020 fall, and at this moment I received most of their feeback. I decided to write down my experiences and hope it might be useful for you. Please be aware that this article might only be suitable to PhD programs in EE, CS, or their equivalences such as ECE and CSE. Below I provide a checklist for all applicants targeting on PhD programs in U.S.:

- Have you prepared your CV, SoP, transcripts, and GRE & TOEFL scores[1]? Also, have you selected your recommenders?

- Have you determined which programs to apply to? Roughly, I would suggest to apply to more than 10 programs, especially for foreign students.

- Have you remembered the application DDLs for each of your target programs? Usually, most U.S. schools have DDLs on Dec. 15th. But I would suggest to use an Excel table to record the application status of each programs.

- Have you asked your recommenders whethey it is convenient for them to write recommendation letters for you? Recommendation letter is the most important factor in PhD applications. Please ask them early for your professors to better arrange their schedule.

- Have you sent out cold-emails to the professors at your target schools? It can largely increase the chance of your profile being noticed.

Besides this checklist, here I am hoping to write out some personal feelings in my application. Many articles on the Internet has already discussed how to improve your profile (e.g., how to write SoP), so here I want to provide some inner thoughts. **Disclaimer: What I write below is valid around 2020. Please do notice it might be outdated**.

- **Uncertainty**. Getting accepted to PhD programs, especially those top ones such as MIT, Stanford, UC Berkely, and CMU, is full of uncertainty. When I applied to PhD programs, it's fair enough to say that I had a strong profile (e.g., 3.8+ GPAs, strong letters from well-known professors, around 8 papers published in top conferences or journals). Two of my recommenders are former faculties at CMU and I also actively reach out to their collaborators there. But I still didn't get accepted to CMU, which was unbelievable! I thought among the aforementioned top four schools, for me, it was the easiest to get into CMU... Moreover, I talked with a professor from UC Berkeley in person at a conference, and one of my recommenders is a long-time colleague with him. But I was still rejected by UC Berkeley. You should be aware that all best students on Earth are applying to these schools, and that even if you have the strongest profile among your classmates, some guys on the other half of this planet could still be better than you!

  However, we should also notice the uncertainty from the good side. I cold-emailed professors not that relevant to what I have been doing. One typical example is my correspondence with a professor at Oxford. I was really surprised and happy when I received his reply. Later, he forwarded me several references and I wrote my research proposal based upon them [2]. After submitting my online application and being formally interviewed in a Zoom call, I received an offer from Oxford! My friends said that I even had a large chance to get accepted to MIT than Oxford (say 5% > 1% :-)) because matching is important, but it just happened.

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[1] Students whose primary language is not English need GRE and TOEFL scores.
[2] Applying to Oxford requires a research proposal.

Then how to respond to this uncertainty? Well, not much. Because you simply cannot control uncertainty, but you could adjust your strategy and mind: *Please apply to more schools and relax yourself. Trust you are special and lucky.*

- **Be Proactive**. Proactivity helps a lot in my application. I haven't counted in details, but roughly I guess that I sent out at least 50 emails to professors during my application. It is wise to send emails to your advisors' collaborators, as you usually could receive replies from them. But you should also send cold emails to professors whose research you are interested in, even though you are not familiar with him/her. Take me as an example, I applied to a lot of schools and sent out many emails. At the time of submitting my online applications, I heard back from all schools I was applying (except Stanford!). For each of the school I was applying, I received positive feedback from at least one professor there. This will make your profile get noticed from the large application pool and increase your chance to get accepted.

  Do not be shy, just do it. The worse scenario is your email won't be read. You won't have any loss! But before sending emails, please do carefully read your target professor's homepage, and notice whether he/she has special instructions. This shows you value both of your and professor's time.

- **Be Patient and think less**. I know it is easy to get anxious and think too much when applying and waiting for results. You might be worried about typos in you CV, or your English scores didn't arrive on time. After application DDLs, you will feel relaxed at the beginning, but when January arrives: you just cannot stop refreshing your mailbox to see if new interviews or new messages come. When others receive interviews but you don't, you will feel desperate.

  There is no need to be it! I didn't receive anything from MIT and suddenly I was notified being accepted to its PhD program in Jan. 27th. Even at that time, my English scores on its online application portal were still completely blank, though I sent scores from ETS in November. You see, most worries are meaningless and won't determine your application results at all! Not getting interviews also do not necessarily mean you are out of games!

  Stop it! You know thinking too much is not helpful. It will only make things worse. When you do feel stressed out, do some things you enjoy. For me, I play basketball, hang out with my roommates, or sit at the riverside.

- **Turn to others for help and feedback**. There are a lot of decisions to be made during application, such as how to choose programs, or what to put in your CV. Moreover, it is also important to get feedback from others to see if your SoP needs to be further refined. During my application, I constantly turn to my advisors and friends who have already enrolled in PhD programs for help. Showing your advisors your target schools and professors will reduce your workload a lot! They will tell you whether your school list is aggressive or conservative, and which professors are good. Your friends count a lot too. They know how to write a good SoP and what to put in your CV. At least, they could tell you: 'Oh do not apply to that school. It has bad weather that you won't like!'.

I know applying to PhD programs is scary and not easy. Also, it is a long-time tedious task. But Roman is not built in one day! Making a little progress one day is sufficient. Good luck with your application!