Advice to REU Applicants

So you're interested in research or grad school. You're considering an REU to get that experience and you have tons of questions. Where do I apply for an REU? What does it look like? Do I need to take certain courses before applying? Here, I will share with you my experience applying for, accepting, and participating in an REU. Hopefully this eases any jitteriness you may be feeling while applying for your first REU. If you have any additional questions not addressed in this document, feel free to reach me at fernandesnunez.t@husky.neu.edu.

What is an REU?

REU stands for "Research Experience for Undergraduates" and they are typically summer research programs hosted by NSF (National Science Foundation) for undergraduates studying science, engineering, or mathematics. These programs are usually paid and offer students the opportunity to work closely with researchers. Here's a definition from the NSF: https://www.nsf.gov/crssprgm/reu/

Where can I find REU programs?

I found some REU opportunities from subscribing to the Math Club's mailing list. The Math Club meet Thursdays from 4-6PM in Nightingale (Math lounge), or I am sure they'd be happy to add you if you were to reach out at northeasternmathclub@gmail.com. The REU I participated in however, I heard about from a Northeastern professor. If you really enjoy a course, I recommend visiting that professor during office hours and simply asking them if they know of any REU opportunities. If they don't in that moment, they may keep you on their radar so when an opportunity does pop-up, they'll let you know! Some things just have a way of working out! Finally, the NSF has a search engine for all possible REUs that you can go through and apply to: https://www.nsf.gov/crssprgm/reu/reu_search.jsp

Where do I apply for an REU?

Once you choose the REU you want, there is usually a website associated with the university or college that has the application portal. The NSF website has access to these links.

What do I need to apply?

Most REU applications ask for a personal statement, unofficial transcript, 2-3 letters of recommendation, and general background questions (Name, University, etc.). If a program states they do work in courses you haven't taken, I still encourage you to apply! I only took 2/4 courses my program mentioned in the application and I was still accepted. Don't sell yourself short! Also some quick advice on personal statement writing: don't write about something you don't know

much about. This may include using math language you're actually unfamiliar with or speaking for a field that you have no interest in. It's best if you stay honest and true to you!

I was accepted into a program, what now?

If you have multiple offers, lucky you! Now reach out and confirm your top choice. Once you make your choice, the advisor of the program should stay in contact with you and keep you updated on next steps. If you're feeling a bit of imposter's syndrome, don't. I know, easier said than done. However, you were accepted because they believe you can do the work. If you ever feel stuck or confused during the program, advisors and faculty are there to answer your questions. This program was created to give you the experience, and with that being said, the faculty hiring you do not expect for you to have all the answers. Something that may help with feeling more prepared is reaching out to the faculty prior to starting the program about any recommended reading material that may be available on your research, but don't be alarmed if the reading is too dense or difficult! Sometimes research papers aren't written for undergraduates and the purpose of an REU is to bridge that gap (with the paper your team will create at the end of the summer).

My REU was called PRiME: Pomona Research in Mathematics Experience and was led by Edray Goins, Professor of Mathematics at Pomona College and President of the National Association of Mathematics. The following link is the report of the work done during the Summer of 2019:
https://drive.google.com/file/d/1lJB4RvPP2e7hYYxVnOhLznLy5dWfo2UQ/view?usp=sharing

Again if you have any questions about the REU process, or about the REU I participated in, I'd be happy to share my thoughts! I am just an email away: fernandesnunez.t@husky.neu.edu.