

Becoming a UX Researcher: Getting into Human Factors grad school

This is part 1 of a series about how I went from a psychology undergraduate to a UX researcher.

As a UX researcher with some years of experience behind me now, I can still remember the moment I first learned about the field of Human Factors. This moment started me down my career path towards UX research.

I often get asked for advice on LinkedIn or Reddit about breaking into the field of UX research. There are so many possible ways to become a UX researcher. I chose the path of graduate school. The way it worked out for me was a matter of effort and luck combined - entering industry between 2017-2019 is extremely different from starting out in the past few years.

Graduate school is certainly not the only path to being a UX researcher. It did work well for me. The discussion of why this is the case is better suited for a later part in this series, about what I did in graduate school. At a high level, I'll share now that I left graduate school feeling extremely prepared to do any method that I may need, whether I knew how to do it yet or not.

For those reasons, more than advice, I'd like to offer my experience as one case study that worked well by my own standards and situation. I'll also cover some basics of things that I didn't know going into the graduate school process.

Note: I started writing this article 4-5 years ago and it's funny to come back to my writing now. It's also an exercise in vulnerability to share the statement of purpose, written when I was 10 years younger, and go over details like my GRE scores. That said, the more information we can share with each other, the better off we all are.

Undergraduate beginnings

In 2013, I was a psychology undergraduate at the University of Minnesota Duluth. I knew I liked cognitive and social psychology, but didn't really like abnormal/clinical psychology. I also had no idea what to do next. I was in an office meeting with my experimental methods professor and asked what I could do with my degree. He mentioned a few fields, but when he said 'Human Factors', a lightbulb went off. This field of psychology studies the interactions of humans with technology. I never knew this area had a name but once I heard it, I felt like my fate was sealed. I loved technology and I always wondered why my favorite apps were made the way that they were. How to achieve the goal of practicing human factors was my next challenge.

Looking at the jobs I wanted, which often fell under the titles of UX researcher or Human Factors engineer, I didn't feel qualified as an undergraduate. My experience at that point consisted of being a teaching assistant, doing a small experimental study for a class and other part time jobs. I decided that getting an advanced degree was the most surefire path to the experience I saw in job postings. I liked school, felt successful in my past experiences there, and most jobs listed human factors as one of the top degrees for needed experience.

I'll discuss how it fits into the bigger picture, but the most important things I did during undergrad were:

- Be a teaching assistant
- Make real personal connections with 2-3 professors (partially for references)
- Do a solid undergraduate research project end-to-end

There is more I could have done (published the research, been a research assistant), but this is about what I had to offer when it came time to apply to graduate school. The world may be more competitive than it was 10+ years ago, so nowadays I'd strongly consider at least turning a research project into a proceedings paper of some kind.

Kinds of degrees

I set out on [human factors](#) because of its relationship to my field of psychology. Human-Computer Interaction is also a strong field. There are even direct UX undergraduate and graduate programs that incorporate research in the curriculum.

I have worked with extremely talented researchers with and without graduate degrees. The graduate degrees have ranged from anthropology, to political science, to linguistics. There is no single degree that makes you qualified for UX research. That said, human factors degrees (and perhaps HCI) are often listed near the top of job descriptions for a reason. Human factors as a field focuses on psychology applied to a product context - it's hard to get a curriculum in academia more direct for UX research than that. Consider if you want to do a degree like cognitive science that is more generalized - it can take effort to reframe that for employers after you graduate.

Between undergrad and grad school

My path was not linear. The two years between undergraduate and graduate school I worked multiple jobs trying to learn what career I wanted and how to do it.

I started right after school as an intern at the American Swedish Institute, a museum in Minneapolis. I got to create a focus group plan and analyze the data, my first applied research project. This internship only lasted three months. I realized from this that I did like working with diverse stakeholders and running research in an applied context.

Over the next 1.5 years I worked as a freelance videographer, did corporate temp jobs, and worked as a camp counselor. None of this directly applied to graduate school applications or UX research. In fact, some of it was downright mind numbing (e.g.: processing annuity transfer paperwork manually). Other parts I wish I could still do as my full time job (e.g.: camp counselor in the BWCA).

When I could, I had informational interviews with people locally to learn about the field. Preparing questions and being highly engaged helped me get the most out of the time and build potential industry connections. Finding informational interviews was hard to do 10 years ago, but now with LinkedIn and ADPlist, it's much easier to find people that you can connect with for a quick call. The primary goal of any informational interview is to learn, not to get a job offer or referral.

Looking backwards, it's easy for me to feel like it was clear cut. Spending time writing this post, I remember that I spent these years feeling confused and unsure. Despite that, I kept momentum in a direction based on the best information I had at the time - that's about all we can do.

All throughout this time, I was studying for the GRE with my eye on graduate school.

Applying for graduate school

Getting into graduate school comes down to a **few key pieces of work** and some can take a lot of time: **GRE** (if required), **letters of recommendation**, **statement of purpose**, **resume/CV**, and possibly a **work sample** (if required).

The specific requirements for these are listed in the programs I applied to and using the [HFES program directory](#) helped organize information about all the possible programs. This is a great resource and was critical in my school selection process. I originally decided to go for an MS. My goal was to go into industry and this seemed to fit the best. PhD programs can take 4-10 years and more explicitly focus on training for academic research careers.

I researched and logged programs based on the price, location, and what the professors that taught there did research in. I did not prioritize accreditation by HFES (this didn't matter all that much in my experience). I **made a spreadsheet to track** requirements, locations, cost, and other details. This was a really useful tool for organizing my thoughts.

After looking at programs where I could meet requirements (i.e.: no engineering background required) and locations I could happily live in, I was left with about 10 programs. The next step to narrow down was aligning with research interests. Especially for PhD programs, you apply to the professor more than the program. Go to each program and read the professors' CVs - do you want to participate in the research they're doing? That is a good sign to apply there. Secondarily, look up alumni on LinkedIn and see where they work now.

This process got me down to 5 programs and I wanted to apply to, and also specified the materials I needed to do so.

MS vs. PhD

... need to fill in, talk about applying for mostly MS programs, but choosing PhD in the end because of fit and funding. Cite MeasuringU literature about total earnings being even over time. Talk about needing to like school a lot for PhD. Talk about value of deeper quant methods. Talk about MS being quicker to get into the field and more focused on applications than developing novel methods.

Graduate application materials

Each component needed for applications took its own strategy and effort.

The **GRE** was required by most programs I applied to. This is a challenging test! Working part-time and living with my parents enabled me to spend the time I needed to get the scores that I did. It was not glamorous but I am very lucky to have had this as an option. I used Magoosh and put in many hours a day for 4 months. I took the test and got my scores back. My verbal scores were excellent but my quantitative score was near the bottom third (ouch!). This was not good enough based on the specific criteria of the programs I was applying to. I took a break for a couple months and studied hard again. The second time around I got excellent scores for verbal again and a slightly above 50th percentile for the quantitative. When I left the testing facility with my preliminary scores where I needed them to be, I raised my arms above my head in celebration, so happy to be done with this test. Some programs do not require the GRE, which may get you off the hook. In particular, it seems many MS programs are moving away from the GRE.

Letters of recommendation (I was told) need to be primarily academic. I recommend getting close with 2–3 professors while an undergrad (if you're no longer in undergrad, you could also volunteer at a university lab). This can be as simple as showing up to their office hours a few times to ask the theoretical questions you find interesting. A little goes a long way. I had two professors from undergrad and my supervisor from my museum internship write my letters of recommendation. There is no perfect formula here, so if you have more industry experience, you may have more letters of recommendation from there than academia.

The **statement of purpose** ([view mine](#)) is the most personal piece of your application. My general format was to show what personally led me to this path of HF/UX, what skills I had already demonstrated in my work that would serve me well in the program, and what I hoped to learn from the program. Mention specific professors (one or two) and particular areas of their work and papers you find interesting: don't skip this step! And finally, remember that *you don't need to have all the answers already*. This is a school application, not a job application, you're primarily going there to learn new things, not to have already mastered it all.

My **resume/CV** took about 20 hours for writing, formatting, and tweaking. Depending on your process, it's not bad if you take longer. There are hundreds of great general resume guides, so I won't cover that here, but aim for overall clarity and focus on measurable outcomes. The bulk of

the work here was everything I'd already done in work and school, in other words, the content. I'd recommend getting as much research experience as possible. I mainly drew from an experiment I conducted and designed for my experimental methods class senior year of undergrad. This is more than nothing, but I also had no papers published. If you can get a proceedings paper published, even at an undergraduate conference, then put in the extra work to make that happen. If you're already past undergraduate school, universities offer volunteer positions at research labs. Just find a professor and reach out.

Decisions

I applied to 5 university Human Factors (or related) programs: 4 masters programs and 1 PhD program. The PhD program I applied to had a masters offered along the way to the PhD, which is why I considered it in my mainly masters-focused set of schools.

- Georgia Tech HF MS: I got into this program with the chance to compete for graduate assistantships that would partially cover tuition expenses.
- University of Washington HCI MS: I was outright rejected from this program, I think likely because of a lack of design background.
- UC Long Beach: I was waitlisted, and got an offer after I chose another school.
- University of Arizona HF MS: I never finished my application because their process was so late I had already accepted another offer
- North Carolina State University Human Factors MS/PhD: I interviewed in person, was accepted, and offered full funding for 4 years.

This decision was almost made for me. Only one program (the PhD program) gave me guaranteed funding. I didn't know this going into it, but you're only likely to get a full funding offer from a PhD program and not an MS. One application timeline was so late, I never even applied. Ultimately, the thing that sealed it for me was the in-person interview.

You spend a ton of time with the professors and with students in your program. I got a really good "vibe check" at my interview - all were polite and engaged and the students seemed to be genuinely friends with each other. I might have taken the offer for the funding anyway, but the interview made me realize in my gut it was the right call. That turned out to be true, but that's for later part in the series. The moral of the story for right now is to take your interview as a great opportunity to learn about the program. I was also able to secure a small stipend for the trip, but I'm not sure how common that is.

Wrap up

I started this article years ago but never finished it. I had a lot of reach outs about grad school back then, I think because I was a lot closer to it. It certainly feels far away now. Still, the decision to go

to grad school and the experience I got there was hugely influential. I'll discuss that more in the next post.

If you're thinking about graduate school for UX research, I highly recommend human factors as a type of training for it. Find the programs you want to apply to, gather your materials, and star

Don't be intimidated by graduate school by thinking you need to already know the material before you apply - you are going there to learn so you don't need to know it all in advance. You just need to be able to demonstrate your ability to work and to learn more.