My Data Science Journey

2020 was a difficult year for a lot of people, bringing a lot of new and unique challenges. We welcomed our second baby to the family just as lockdowns were beginning and my husband had to start working from home. We moved during his paternity leave, after we realized we needed a bigger house for my toddler to burn energy in case we are not feeling safe enough to bring kids to the public play areas. Because our life wasn't crazy enough dealing with the pandemic, moving to a new house, and dealing with a new baby, I also decided to seriously try to reenter the Computer Science field.

There are many reasons why I wanted to get back to work. At some level, I just wanted to prove I can do it. I also wanted to make money to improve my family's life. Perhaps most importantly, I wanted to make my kids proud the same way my mother made me proud. She was a PHD educated, working woman in China at a time where that was extremely uncommon, and I was very proud of that. Despite my motivation, I found it hard to successfully balance work and family life in the past. When I was working I had a very long commute that contributed to that difficulty, so I saw the Covid-19 motivated Work-From-Home as an opportunity to ease back into working with no commute. If I proved myself reliable working from home, maybe it could even be a gateway to permanent work from home. What a great time to get a job!

Reality was quite different from what I imagined. Covid-19 did force a lot of businesses to adopt a WFH model, but it also forced many others to close or downsize. I received even less interest than in my prior job searches, despite sending more applications. I assume this is due to more out of work developers competing for those jobs. I expanded my search criteria and began applying to jobs outside of what I consider my strongest skill set (Python Development with AWS resources like S3 and DynamoDB) and including entry level jobs that used any technology I'd touched before, or that my husband said he was familiar with (Java, PHP, Perl, etc. with databases like MySQL, MongoDB, PostgreSQL). When I did get an interview, that meant frantically studying a set of technologies I barely knew for 24-48 hours, doing (at best) "ok" at an interview, and then switching to a completely different set of technologies a few days later.

This job search process was demoralizing, time-consuming, and worst of all it felt like I wasn't actually sharpening my tech skills to prepare for a job I really wanted. I spent so much time switching back and forth between different topics that I didn't make much progress on any of them; the overhead from context-switching was too high, especially on top of my responsibilities as a mother. I realized sending out tons of applications and participating in any interview a company would give me wasn't a good way for me to get back into the job market, but I didn't know if there were any other

options. My husband and I spoke to every recruiter he'd worked with in the past, and one of them recommended a Boot Camp.

Initially, I was hesitant to attend a Boot Camp because I felt a Boot Camp certificate was redundant with a college degree in Computer Science, and I didn't want to spend even more money (I'd already paid for 4 years of college!) trying to find a job I might not even get. Still, I investigated some of the more highly rated bootcamps in my area and found one that seemed like a good fit. Flatiron has a money back guarantee if you can't find a job, and one of their offerings is Data Science. Data Science is often a Masters or PHD track that can be a good fit for Computer Science graduates, and felt like a good way to build new skills that improve upon my CS degree and Python expertise to unlock new and interesting opportunities. In addition, Data Science has been on an upwards trajectory for a few years now in our local market at least, and has good pay.

I felt much better about focusing on one specialty and building a strong skill set in that area instead of spreading myself thin trying to learn everything at once. After starting the course, I started to notice other benefits as well. The structured approach of the class is much better than haphazardly researching a topic on my own, even if I did stick to one topic. The schedule is also helpful: the weekly meetings forced me to start scheduling times I would be working and my husband needed to take care of the kids, instead of just squeezing time in wherever I could. Shortly after setting the precedent with classes and other meetings, I started scheduling time for independent work as well so that I could make consistent progress each week to keep pace with the class. The support is great as well. Most of my programming issues are resolved most easily by asking my husband for help troubleshooting, but having experts available for questions on Slack and for weekly meetings is very helpful for the cases he can't answer. Working from home on a part time schedule is the perfect fit to make everything work, and I'm very excited for the boost in my job search from obtaining a certificate and the end of the course and the interview prep from Flatiron as well.

Even though the course is as good as I could possibly hope, there are definitely challenges associated with taking it during the pandemic: Focusing despite constant distractions is something I've learned to live with. Outside my scheduled work hours, I also try to get work done whenever possible (e.g, if one kid is napping and the other is enjoying some TV time), but I need to be close enough to them to hear if anything happens or they need anything, so I've had to learn to tune out Baby Shark and Blippi while I work. Even though it is sometimes necessary, I've learned that (as much as possible) it's better to have 1 hour of quality parenting time and 1 hour of quality work than 2 hours trying to get work done while half-supervising kids.

Transitioning from being a dedicated housewife was also surprisingly difficult; lowering my standards for housework and food was not easy. My husband did step up to take on some of the work, but he couldn't replace all the work I'd done before,

especially since his child-care responsibilities were also increasing. We've found "smart" cleaning tools like Roomba, iMop and a Litter-Robot for our cat to be extremely helpful in lightening our load. For food, we've had to settle for more leftovers and more Costco pizzas than we've eaten in the past.

Making a working schedule probably is the biggest challenge I faced. During the pandemic I didn't feel comfortable bringing kids to the supermarket. That used to be like a fun event for them, while I was also getting necessary chores done. But this year I needed to find time for someone else to take care of kids while I go shopping alone. We skipped our routine medical/dental/vision visits, because childcare was too difficult to coordinate during the week. Newborns need to frequently go see pediatricians, and those visits are difficult to perform remotely, so we prioritized those with the sick time we could take. We used to be able to bring both kids to the doctor, but this year siblings were not allowed, so we needed both parents free for every visit (one to watch the kid at home, the other to attend the doctor visit) instead of one.

Thankfully, I also have a good support system from my family which I think is essential to succeeding as a working mom. My husband has stepped up every day, we have help from my in-laws every week, and when things get overwhelming despite that my mom makes the drive down to help out. I've learned to not be ashamed to ask for help when I just need some down time. It's impossible to go at full speed 100% of the time, and it's easy to burn out only asking for help when I need to get classwork done; I need some time to recover as well.