TURNER:
This is Alumni Aloud a podcast by Graduate Center students for Graduate Center students. In each episode we talk with the GC graduates about their career path, the ins and outs of their current position and the career advice they have for students. This series is sponsored by the Graduate Center’s office of Career Planning and Professional Development. I’m Abbie Turner, a PhD candidate in educational psychology at the Graduate Center. I work in the office of Career Planning and Professional Development and I interviewed Suzie who earned her PhD in earth and environmental science from the Graduate Center. She is now a subject matter expert who works remotely for the storm water tech company, StormSensor.

TURNER:
Today on the phone I have Suzie Housley who graduated from our earth and environmental science PhD program at the Graduate Center and she works for StormSensor in Nashville, Tennessee. And so she's going to tell us all about what it means to be an environmentalist in industry, hopefully and a scientist. And we'll get to hear all about it. So hi Suzie, thanks for joining me.

HOUSLEY:
Hey, no problem. Nice to talk to you today.

TURNER:
So tell us about where you work. What kind of company is this?

HOUSLEY:
Yeah, I work with StormSensor, which is a storm water tech startup company based out of Seattle and I work remotely just outside of Nashville, Tennessee. And we work on developing hardware and software, internet of things technology to help cities track how water flows through their cities, adapt to climate change and track where there might be sewer overflows and in general just manage their water in a smarter way.

TURNER:
Awesome. So you work remotely all the time?

HOUSLEY:
I do travel, from time to time we have group meetups, I'll fly out to Seattle to our main office to meet with everybody. I travel to conferences and sometimes out to where customers might be installing sensors. But my day to day work is all from home.

TURNER:
Okay, great. So tell us about what is a day like at your job, what kind of work are you actually doing?

HOUSLEY:
Great. So like I said, I live in Nashville and the bulk of my team is out on the West Coast. So I try to get up early in the morning, any of the deep focusing tasks I need to do. I like data analysis or if I'm writing an article or a blog for the company website, I will try to do those early in the morning before anyone's having coffee on the West Coast. And then our team has a standup every morning, which is just an all hands on deck meeting where we have everyone who works remote, everyone who works in the office, we all have a video chat and we say what our main goal for the day is, determine if there's blocking anyone else, how we're going to deal with it. And then we go our separate ways to work on our projects. So from that point on, I'm doing tons of collaboration, my position is as a subject matter expert, so I work with all the different developers to help them design the product.

HOUSLEY:
So for example, I might be working with a software developer to help them apply the different metrics that we need to make sure users can get a real time alert when there's water coming out of the manhole in the middle of their city. Or I might be working with a data analyst to help them design a study so we
can pick which flow equations are the best under which circumstances. I also work a lot with our
customers, so if someone's thinking about designing a smart water system for their city, I might help
them determine, well, where's the best place to put a sensor? Where are you going to get the best data?
What types of alerts are going to be most helpful for you as you try to manage water in your city? And I
also talk to users a lot and get their feedback on, when you're using the software, would you like to
group data points in a different way so you can figure out if you're meeting your permit requirements or
not faster?
HOUSLEY:
Or is there something that would be able to zoom in on a particular storm and look at that data a little
bit more easily? How can we get that slated in and brought back to the project team to make sure that
we are developing a product that is super useful.
TURNER:
Wow. So yeah, I've never heard of any of the things that you're doing, so this is super new and
fascinating. And so I'm wondering what kind of research were you doing in graduate school?
HOUSLEY:
So this is actually a lot of new work for me as well. All of my background is in environmental science and
I knew pretty early along in my undergraduate career that I was really interested in water quality. So I
took a journey, I would say like a circling in topic rather than diving deep into it like a lot of other
researchers do. So I had studied water, water quality, water chemistry, water policy and I came to the
Graduate Center specifically to do an interdisciplinary project. When we're looking at water quality, so
much of it is controlled by the community around it. What are they throwing out on the street? What
are they flushing down the toilet? What kind of chemicals are they putting on their yard? All of that gets
into our water. And I wanted to look at that component, which is really something I had not dug into
before. So I had the cool experience of being in the earth and environmental science department.
HOUSLEY:
My main advisor was a geochemist but my other committee members were in sociology department and
also in geography because I was doing some mapping as well. So I had a good time building on my
experience, I had never done any sociology before, so I designed a community survey looking at ways
that the community at large could work to lower the amount of pollution going out into our cold waters
when we have storm events. And ended up developing a program that the city is piloting now aimed at
encouraging water conservation during rain events and while I was working, I also took advantage of a
couple of different fellowships, which were great. Those were mostly aimed at teaching, so I taught in
New York City public schools, they're a national science foundation grant, also taught some undergrad
classes and that really helps me a lot.
HOUSLEY:
I think a big stumbling block for a lot of us researchers can be science communication and I think taking
advantage of those opportunities really helped me be able to communicate what I am doing as a
researcher, which I think has helped me as I moved out of academia and into industry.
TURNER:
Wow. Yeah, definitely. Science, communication exercises, wherever you can get it. Teaching, talking to
friends, did you have significant prior experience when you entered the job market after graduation?
Like going from teaching to private industry with this kind of data that you're doing, it's a little different.
HOUSLEY:
Right. So from my undergrad I went straight to my master's and then I took a job as an environmental
scientist for a government agency. So I did that for about four years prior to coming to the Graduate
Center. So I had that experience to lean on. I also had the teaching experience from the Graduate Center,
so I would say I had decent prior experience leaving the market. It was not specifically having experience
in the field I ended up entering, but I think in the startup world you learn pretty quickly that everybody just learns as they go. So that's been exciting and I really enjoy facing new challenges every day. So it's kind of right up my alley.

TURNER:
Yeah. That does sound exciting. And well, it's not an exact match, she definitely are aligning a lot of the things they need. Right? What were your initial career goals like in PhD EES program? Did you always envision yourself doing tech environmental stuff?

HOUSLEY:
No, I actually had no plans of doing anything nontraditional. I thought I was going to go into a professor role. I really do enjoy teaching, I love being around students and that energy and all the new ideas. But it ended up the way life happened, I had a baby about 10 days after I graduated with my PhD and so I had decided prior to graduation that I was going to wait on applying to anything because I was just headed into two really big unknowns for me. I had no idea what it was going to be like to be a mom, I had no idea what it would be like to be a professor, so I just decided to wait a little bit. And I'm glad I did because I realized wanting to go into something where I would have a little bit more flexibility with my schedule and specifically the ability to work from home at least some of the time.

HOUSLEY:
So I started out, at first I worked for an environmental nonprofit for a little bit and that was fine, but what really drew me into the startup world was just that need for constantly being challenged, constantly doing something new. I really liked the idea of being part of a team that's creating something, inventing something really and solving problems, practical problems out there on the ground, so that's what drew me into that world. And I found storm water tech startup company based out of Seattle StormSensor where I'm working now and they ended up bringing me on as a subject matter expert, which is how I got into the tech field with my background not necessarily being in technology itself.

TURNER:
I'm wondering did you find the company and then decide, yes, this sounds like a place I want to work for and you had them choose where you would belong or did they have an opening for a subject matter expert and you just thought I can fit that role?

HOUSLEY:
I found them and really I was pulling together a couple other government contracts, I was doing some technical writing and I knew I wanted to do something else. So I found them, they were not advertising for a position at the time and I just said, I have a PhD, I have government experience, I'm based in Nashville, but if you ever need somebody to work with, with this type of experience, give me a call. And I thought, that's probably going to go nowhere. But they gave me a call, they were a very early stage startup at the time, so they were in a fundraising period where typically, how a lot of tech startups go is you have to get, raise a bunch of money, then you can hire on some people and you're building the ladder as you're climbing it. So they were in that process. So they let me know, if we can raise the money, we'd love to bring you on the team. And it all just ended up working out.

TURNER:
And how long would you say you had to wait between contacting them and saying, I would love to work for this company and then actually being able to bring you on?

HOUSLEY:
About three months.

TURNER:
Okay. Actually not too bad. Close to the government hiring process, right?

HOUSLEY:
Yeah, pretty much. Yes.

TURNER:

So what do you think was most beneficial? What do you think made you an attractive candidate for this company? Do you think it was, you align your interests with there's, how were you convincing?

HOUSLEY:

Right. I think for this particular position, it was my breadth of knowledge around the subject and like I mentioned earlier throughout my career and academic journey, I've really circled the topic of water quality. I've done a lot of work on water chemistry, I've done a lot of work in water policy, I've worked for the government and I've seen those policies in action. And then I've worked in academia and done the modeling and the chemistry, I've worked with the communities. So instead of, not saying there's anything wrong with it, but instead of doing the academic track where you tend to just dive deeper and deeper and deeper into a certain subject, I really attacked water quality from all angles and I think that made me an attractive candidate because it seems like as a subject matter expert, I can be that person the team can go to when they say, how do we help cities meet their permits? How do we know which flow equation to use?

HOUSLEY:

How do we figure out some of the other people, their experiences in writing code or developing the front end of the software or building the mechanics of a piece of hardware and they need someone to guide and say, how do we do these things in a way that's useful from a water quality perspective? So I can be that common thread through the company.

TURNER:

Wow. I think this position would be really attractive to a lot of scientists who want to see their science applied immediately in the real world. So I'm wondering if you have any advice for current grad students who are interested in being this, like maybe a subject matter expert that their colleagues go to for the thing that they happened to have done their PhD in.

HOUSLEY:

I was going to say, it's funny you said that because I had written out a few things here and my first one was, be practical. If you're looking to go out and to be in industry and specifically in the startup community, you're looking to solve a problem. So you're looking to apply your science in a way that a city or a certain community can immediately see the value in and run with it. So if you're interested in practical science, getting solutions out there, solving everyday problems, that's a great thing. I would also say work on your ability not just to communicate science, but to communicate across fields. So a lot of times in grad school we talk to the people in our department and we can get very good at that, but in industry it's very valuable to be able to communicate to someone who maybe is an expert in something else and which I really had to learn how to talk to coders, people who write code for software. That's not something I have experience in, so being able to communicate a water quality concept in a way that they're understanding it.

HOUSLEY:

And also the other way around, that I understand how code logic works enough that we can decide together what is the best way to write this software so we can deliver water quality information. And then another piece of really maybe more general advice, being in the industry or startup community specifically, you really need to be a self starter. I think this is probably really applicable to people that are just getting through grad school also, but I always say it's really good to be able to push your limits to what you think you can't do. You can usually do a little bit more, but that's the part you don't usually have to tell grad students but I think the other part of that is knowing your limits and not get yourself into that burnout stage, which you hear about all the time in the startup world and maybe in grad school too.
TURNER:
So that's leading me to this next idea of what is your work life balance like with this startup job that you work for remotely? How do all these things factor into your work life balance?

HOUSLEY:
Right. And I first off with, I think work life, the term balance really doesn't exist, I feel like it's more like a work life maintenance. And I'm pretty sure the number one thing that I have learned after working in the startup industry and also having two really small children and working from home is that this is something you have to continually be revisiting. You can't just decide one day I'm going to be balanced and then it just happens. What worked last month for you might not work this month, your home circumstances might've changed, something at work might have changed. In the startup world a lot like grad school, there can be this toxic culture of wearing your stress like a badge of honor. And I am totally not on board with that. I don't think great work gets done that way and I really also, I don't think happy lives are lived that way. So I think constantly checking in with yourself is key.

HOUSLEY:
I was just joking with the CEO of our company actually this week that I sometimes just need a reminder that I'm the one in charge of my life. So if something's not working for me, if I'm feeling burnt out, I can change that. I can get up at a different time every morning, I can go to the gym at a different time, I can maybe make my lunch the night before so I don't get distracted and work through when I should've been eating or I can take a day off if I need one. So really just making sure that you're being mindful and continually checking in almost on a weekly basis of how's my work life maintenance going? Is there anything I can tweak to improve my quality of work and my quality of life?

TURNER:
So it sounds like you've also worked on setting boundaries for your work as well, which is something, like you mentioned, that graduate students might not be the best at.

HOUSLEY:
Yeah, I've had to do quite a bit of work there, I think probably like a lot of grad students, I'm definitely that type that can do people pleaser type personality. In grad school is a lot like the startup world, there's about 20 things that need to be done right now and you have to be able to take a deep breath and prioritize those and realize this is what I can do now, this is what I can do tomorrow and this is what we're going to have to make a plan to do later. And it's not always easy to set boundaries, it's definitely a challenge. Definitely don't feel good inside every time you have to tell somebody no, but it's a valuable skill to learn. And I think the thing that helped me learn to set boundaries the best was realizing that my quality of work when I am burnt out and trying to do too many things at once, isn't the greatest.

HOUSLEY:
So even if you're fighting against that voice in your head, telling yourself, oh, you're being lazy if you don't say yes to everything, I can answer that now and say, actually I'm not going to do a good job on any of this if I try to do all of it. So I need to say no to two of these things or else my work isn't going to be top quality and I need to be delivering top quality work. So I do have high standards and in order to meet them I have to say no to something.

TURNER:
I like that idea. I like those thoughts. So since you do have experience, it sounds like you've got government experience, you've been in academia a little bit, and now you're in startup world. Can you pick out some of these pros and cons of these different kinds of work sectors? Like what do you like about being in a startup or what did you like about government work or what are the benefits to leaving to home or whatever you've got?

HOUSLEY:
Yeah, it can definitely compare and contrast there. Government work is great, it's study if you like routine, if you like knowing you always have a job tomorrow, if you like, you usually get a nice steady paycheck, you don't have to worry about getting grants or getting funding and you usually get good benefits so that's a nice stable job. The downside there is it's not usually the fastest pace, some cities or different government agencies may be more progressive than others. I found for myself personally, I wasn't quite challenged enough working at the government, I prefer a little bit more of the fast paced, challenging environment. And for academia I think that there is a lot, I think a lot of this is changing, but I think being a new junior professor in academia is very challenging. Now this is something I didn't experience myself because I didn't do it, but I saw a lot of my colleagues going through the same thing of just getting really heavy course loads, maybe not getting paid exactly what they're worth all the time depending on where you ended up working.

HOUSLEY:
And that was part of that ended up going into my decision not to pursue that career path right away because I was honestly feeling like, I don't know if I can handle all of those expectations right away at the same time that I have a newborn baby, I think I might need to try something where I'm in a little bit more control of my own schedule. I will say it's hard, I mean sometimes I don't share that part of my career journey because I feel like, I don't know, it makes me, there's always this guilt in academia for not becoming the professor and not doing what everyone thought you were going to do or even you thought you were going to do. But I think that part of the journey is interesting and at least proving to myself, and maybe it might be inspirational to someone else, that if you want to do this, if you want to stay in your career and have a PhD level career, there are things you can do to make that happen for yourself.

HOUSLEY:
You might be in the middle of the country, but you can probably figure it out if you really want to. And it's definitely challenging, I'm not a Southerner, so it's challenging for me to fit in here. I definitely miss having friends in academia and my work friends, they're all in Seattle, so I don't have, I don't get to do that happy hour thing. I loved at grad school to just go out and get a beer and we'd all be talking about our research and all of the exciting things we're doing. So I definitely miss that aspect of it. But there's balance and you can make things work and I'm super happy to have found a way to be involved in a really high level career from where I am.

TURNER:
Can leave your comfort zone of New York and still find a job. Because I think your story is fascinating because you sought it out and people might not think to look at a company, to find that little company that's doing things they find interesting and then tell them, I could be an expert for your company. And I think that's really interesting that you took charge of it in that way.

HOUSLEY:
I remember having conversations while I was looking for something. It would take me, it didn't take me forever, it took me a few months. But with my mom saying, I know I'm a square peg for having this level of, I have this level of experience but I want to work from home. But I know that with everything out there these days, there has to be a place where I fit, so I I turned down a couple of job opportunities because I knew there had to be a way I could make what I wanted to do work.

TURNER:
That's, see, I think that's very inspirational to keep at it till you find what you had in mind. So after graduate school you made a move out of New York and a lot of people struggle with whether they want to leave New York. And I'm wondering what helped make that decision for you?

HOUSLEY:
Right. Yeah. So it wasn't my 100% decision alone to leave New York. We left because my husband who had been working for a startup at the time, their contract ended and we decided we just couldn't afford
to stay in New York without knowing what we were going to do career wise. And I was just writing my dissertation at that time, so we went back to Florida and I finished up my writing from there and then I came back to the city to defend my dissertation. So I had already left, my last semester I had already left the city, so we went back to Florida, which was where we had been living before to figure out what we were doing. And that's where I had my first child and I decided I wanted to find something where I could work from home. I tried working for an environmental nonprofit, doing a little bit of technical writing for a little bit, which wasn't too bad, but it really wasn't for me. And then from there we ended up moving to Tennessee because that's where his family was.

HOUSLEY:
So that's how I found myself in Nashville looking to do a job that was more fast paced and tech centric. But I was in Nashville, so that's why I felt like I was probably going to have to find something remote in order to do what I wanted to do. And I decided, I really became dedicated to finding something I could do where I felt like I was utilizing my PhD level experience and being challenged and really adding to the world in some way, which a lot of us feel driven to do. And it took me a while to get there, I actually went on a couple of job interviews and ended up turning them down because the positions were just another government position or a position at a consulting firm, which was just really, I didn't feel utilizing my PhD level experience or giving me the type of excitement that I was looking for. So that's where I ended up saying, I'm going to contact this stormwater startup company out of nowhere just to introduce myself and tell them about my experience and see if they might want to talk to me one day.

TURNER:
Yeah, I think it's really empowering that you were able to hone in on what you found was interesting and convince them that you were going to be as useful as you are. That's pretty awesome. I'm wondering, do you have any overall general advice for Graduate Students who are finishing, whether they're scientists, non scientists?

HOUSLEY:
Well, I would say definitely keep an open mind. There's lots of different career paths out there and if you know the type of work you like and what's challenging for you, then don't feel like you just have to keep walking along a certain path because that's what you thought you wanted when you entered Graduate school or that's what your advisor wants or that's what you think your parents expect you to do. There's plenty of different options out there and you're not a failure if you don't decide to go into academia right away and that might not even be the best fit for you in the first place. You might be able to contribute more to the scientific or research community somewhere else. So keeping that in mind and I also think that maybe I'm repeating things I already said, but just trying to be mindful and always just keep checking in on yourself. Is my career going the way I want it to because I can stop and do something else, I don't have to be committed to this one certain path.

HOUSLEY:
Is my life-work balanced working out the way I thought it would because I don't have to keep going down this path either. I can make little tweaks every day and get to where I want to go. You're never stuck in any one point in time. You can always keep moving forward hopefully in a more positive direction so you figure it out.

TURNER:
Yeah, that's great advice for us to all take. So with that said, I want to thank you for all of your time that you've shared your story with us and we're really excited to maybe hear more about your career in the future.

HOUSLEY:
Okay, great. Thanks.

TURNER:
Thank you again to Suzie for taking time to share her journey from the Graduate Center to StormSensor. The Graduate Center's Office of Career Planning and Professional Development can help you explore your many options for career. Make an appointment to speak with one of our career advisors at cuny.is/careerplan. You can find a list of our upcoming events there and also follow us on Twitter @CareerPlanGC. Thanks for listening.