



Season 2, Episode 4

You're Moving to Finland?

SPEAKERS

Sarah Webb, Jeff Hammond

Jeff Hammond 00:00

We decided it was a great country, in spite of the fact that we have never been here. And everyone asked us, "Have you been there?" No. "Family?" No. "Did you know anyone?" I mean, technically we knew three people in Finland when we made the move.

Sarah Webb 00:16

You just heard from Jeff Hammond, a principal engineer with NVIDIA, who emigrated with his family from Portland, Oregon, to Finland in July 2021. He's the guest on this episode of Science in Parallel, a podcast about people and projects in computational science. I'm your host, Sarah Webb, and Jeff spoke with me about his pandemic work experiences, including this huge life transition, as part of our series of episodes looking at changes in computational science work and workplaces. Jeff was a Department of Energy Computational Science Graduate Fellow from 2005 to 2009, while completing his Ph.D. at the University of Chicago. His practicum was at Pacific Northwest National Laboratory, or PNNL, where he worked with Karol Kowalski on an open source software package for chemical simulations known as NWChem. He then worked at Argonne National Laboratory before moving to Intel in 2014.

Sarah Webb 01:19

Jeff, well, welcome to Science in Parallel. Thank you for being here today and talking with me about your pandemic work experiences. Well, take me back to February 2020-- basically, the last point before this whole pandemic interruption and all of our lives, it sounds like you were in Portland, then.

Jeff Hammond 01:40

Yes.

Sarah Webb 01:40

What was your work situation? What was what was your typical work rhythm? Did you work at home at all? How did your life sort of work in prepandemic time?

Jeff Hammond 01:49

Well, so I'm actually gonna go back a little bit farther and say that, as I noted, I did my Ph.D. work on NWChem with PNNL folks. I did that in Chicago. So from 2006 to 2009, is basically after my practicum ended until I graduated, I went to PNNL two weeks a year, and otherwise worked from my house, in my

living room at a desk that was covered in papers and computers, and talk to Karol on the phone almost every day, certainly a lot. And of course, email and everything else. So I did my entire PhD at home remotely relative to the people that I was working with. When I went to Argonne, I talked to them. And I said, you know, I've had a pretty good track record working remotely. I just want to be clear that I don't have to show up to work unless it's useful to show up to work. But when I'm in the groove writing code, I just want to sit at home in a quiet room with my computers and wear sweatpants. This has been my rhythm for 15 years.

Jeff Hammond 03:04

So I actually went to Argonne very little when I started. But the more I went to Argonne, the more I said, "I like these people. I want to talk to them. I want to have coffee with them. I want to be around them." I would say I was you know half-time at the office. I was traveling, sometimes I was working from home. And for the latter half of my tenure at Argonne, I lived three miles to the lab. Basically I told people, I'm going to work from home unless you want to talk to me. And if you want to talk to me, you have to wait 45 minutes, because that's the amount of time it would take me to get from pajamas, to walking through the door.

Jeff Hammond 03:40

So when I went to Intel, I had the exact same conversation with my manager, who's a good friend of mine. And I said basically, "Do we agree that I only have to show up to the office when it makes sense to show up to the office?" And he said, "Yes, of course." And my manager actually had a home two hours away from the Intel office where we both worked. And he would come in for meetings and things and otherwise work from his house on the Pacific Ocean. I actually was going to the office quite a bit when I worked at Intel up until February because I have small children. And obviously it's it's just nice to separate those spaces. So in February 2020, I was going to the office four or five days a week for the peace and quiet and to work with colleagues. But it turns out when I was at Intel, many of my coworkers weren't in Oregon. I would go to a conference room and dial up people who lived anywhere from California to Massachusetts, to Poland. And obviously when you have an international collaboration of that nature, everyone is remote relative to someone.

Jeff Hammond 04:54

And when COVID started, I said "Wow, this looks like it's going to be bad. I know how to work from home. I'm not going to the office anymore." So I was actually doing the whole social distancing thing. Starting from the third or fourth week of February. I think I went to the office a couple of times, but I've tried to avoid people. I've never been to the office in Helsinki, I've driven by it. It's downtown, I know where it is, I can see the logo on the side of the building, I have no idea what the inside of it looks like. And I will, someday this year, I have been promised that I will be able to set foot in an office. But I didn't request a desk, I would like a comfy place to sit when I come in to talk to people. And otherwise I don't want to take up space.

Sarah Webb 05:38

So how did things change for you when the world shut down?

Jeff Hammond 05:42

There were two major components. One is I stopped traveling. I can't say that I travel as much as some people, but I think I've spent somewhere between one and two years of my life on the road at this point. Other than flying to Finland, I haven't traveled at all since 2020. And that has had an impact on the way we work in our HPC community. We obviously do a lot of email and meetings. But there really has been a strong tradition of let's get in a room together and talk about all the details. And so we've had to learn to work together. And there's an element of learning to trust each other. When you're online, you have two elements of trust. One is you don't have the same level of information you do when you're sitting in a room with someone to know what they're feeling what they're thinking. The body language just isn't always as obvious. And then the second one is there are challenges associated with sharing very, very sensitive intellectual property over online meetings. Historically, there were things that you would not say, on a video conference wouldn't show on your screen because somebody could screencap it. You would fly and show them on your computer in a room. Those sorts of sensitivities exist in this business. We've had to work around that, and we've had to learn to trust each other in those relationships.

Jeff Hammond 07:05

The other one, of course, is I have three kids, and my kids stopped going to school. My wife is not gainfully employed. Obviously, she's very busy. But she started a homeschool process, and we've worked on that. Obviously, I did less of the work. So having to transition the kids to homeschool was a huge change for us. The one thing that made a lot of this work, which was very, very lucky. I had joked about with one of my colleagues about if Intel had told me to travel more than I was already traveling, they would need to basically hire me in home childcare. And I said it as a joke. And the response was something like "Well, you should actually do that." So we actually found an au pair, and she joined our family in December of 2019.

Sarah Webb 08:02

Oh, wow. So you had that in place before COVID?

Jeff Hammond 08:06

Yes, she was wonderful. We got along great. Obviously, for a French woman in her 20s to come to America, she did not get what she was looking for. But she did manage to tour a bit of the U.S. in spite of it. But we had a tremendous amount of good luck, and I don't really know how well it would have worked without that.

Sarah Webb 08:30

Right? Well, what were the age of your kids at the time?

Jeff Hammond 08:34

Well, they're 10, 8, 4 now. So that would have been 8, 6, 2.

Sarah Webb 08:38

Okay.

Jeff Hammond 08:39

We bought a house with a big yard, and we put a fence around it when the two-year-old was starting to walk. So it meant that we could sort of fling open the doors and let the kids run wild. And, you know, we actually had legit playground equipment in the yard.

Sarah Webb 08:55

So how did your workspace adjust?

Jeff Hammond 08:58

I have some back issues, not horrible, but definitely not mild. And if anybody who knows anything about Intel, it's a very, very huge campus in the parking lot makes Costco look tiny. So I got a decent amount of exercise actually walking in from the parking lot, walking through these gigantic campuses of hallways and to the cafeteria. Of course, when I started working from home, so I ended up basically sitting in my desk for 10 to 12 hours a day with about 15 minutes of physical activity during that entire period. And about-- I don't know, three months in I would say-- my back got to the point where if I would lay down on the floor or get down on the floor to play with my kids, I would need to climb up the wall to stand up. It's not like I could do physical therapy. I got a standing desk, and I moved my office down to the basement, and that helped a lot. I don't love standing all day. At some point, the recliner I'm sitting in now is my most important piece of office equipment. For whatever reason, it's exactly what my back needs to not get screwed up. So I sit in a grandpa/grandma-style recliner all day long and have my back at you know, whatever, whatever the 110 degrees or whatever it is. So that's how I sit now. That makes it better.

Sarah Webb 10:28

Tell me a bit about this move to NVIDIA and the decision to make this move because moving to another country is a big move even without a pandemic. So I guess I want to hear how this process came to be.

Jeff Hammond 10:45

One of the things that I did, before I moved, got a standing desk and moved to the basement, is I actually took a cardboard box that used to hold my Mac, it was a nice reclining box. And I put it on top of the hot tub outside because I'm very tall. And so it was the right height for me. So I actually had my standing desk outside on the back patio. Summers in Oregon are quite lovely and not hot. It was July, and I was really enjoying being outside and whatever, helping me move around. If I took a call, I could walk around the house.

Jeff Hammond 11:20

As most folks on the west coast will recall, in August and September of 2020, you not only couldn't leave your property, you couldn't go outside because there were fires. And that was the last straw. So I said to my wife, "This has been hard. Things were bad starting in 2016, for obvious reasons. Things got worse in 2020, for reasons." And then I'm like, "What is the point of having this beautiful yard in the forest with all these trees in Portland if I can't even go outside without a gas mask because the particulate count is 450 when it should be 35?" And that was the point where we're like, "Okay, we're going to move." And we first said, "We are going to move permanently. We want to do this right. We want to go all the way with the ideas that we believe in. What type of society, country environment do we want to live in? Find the one that we like the best and do it and stay."

Jeff Hammond 12:34

So my wife and I have traveled a bunch. My wife's an anthropologist. We like New Zealand, but New Zealand was closed. It's also really, really far away from a lot of things. We have family in France; we have family in the United States. So then we looked at Portugal to Estonia, so basically the entire European continent. My wife speaks Spanish and Portuguese. I speak a useless amount of German. We have family in France. So we sort of had these things and we established a set of criteria. We said, "Okay, we want to go to a place that has a very strong social democracy, is good for children and has the social values." We actually liked to Estonia a lot. But I couldn't go there and do what I do unless I was like an independent consultant. They don't have the offices like Finland does.

Jeff Hammond 13:27

Finland has a huge tradition, starting with Nokia, the cell phone company. But there's a whole just explosion of certain types of technology companies in Finland, so they were a good option. The geography, you know, the fauna and the flora of Finland is really familiar to me from the Pacific Northwest. Obviously, it's quite a bit colder here. But it's not much colder here than it was when we lived in Chicago. So it met all of these criteria. Everybody sends me the same article every year on LinkedIn when Finland gets voted the happiest country in the world every year, right? People know about that. It's a level of contentment and satisfaction that comes from a society that is built around the bottom end of the spectrum is not low. You don't fall out of the bottom in Finland. Finland has basically eradicated homelessness. So the major downsides we looked at: Finland has the highest marginal income tax rate in the world. However, for people who like to actually get what they pay for, it's a wonderful country. I don't save for college anymore, because the moment we get permanent residency, my kids are entitled to free tuition, basically until they enter a Ph.D. program, at which point they'll be paid.

Jeff Hammond 14:45

We decided it was a great country, in spite of the fact that we have never been here. And everyone asked us, "Have you been there?" No. "But surely you have some connection? Family?" No. "Did you know anyone?" I mean, technically we knew three people in Finland when we made the move. And one of them was a guy that I met 20 years ago. He lives walking distance north of me right now, and we're great friends. But I mean, I hadn't seen him in 20 years. So we did this about as, quote unquote, blind as you could do it. But it made a great deal of sense.

Sarah Webb 15:23

It definitely sounds like a choice that was audacious, perhaps.

Jeff Hammond 15:29

We did as much research as we could possibly do. But there was absolutely an element of "this is crazy." My good friend at NVIDIA, he basically was like, "I mean, I want to work with you. But what are you doing with Finland? Tell me more." And I told him at some point, I said, "Look, after the after the 2020 that I just had, I just can't imagine it getting any worse. Look around. Why not? It is worth the risk to attempt this." And it's turned out to be absolutely wonderful.

Sarah Webb 16:02

Well, tell me how it worked.

Jeff Hammond 16:03

I did talk to Intel about transferring me to Finland, and they were willing to do it. But what I realized is that I wanted a virtual change of scenery. There's elements of things where when you change one thing, it's really hard to make the other things work. And so, I felt like, okay, if I'm going to really move to Finland, I'm going to change my situation within the community of technologists that I work in. And it would be nice to have a clean break and make a lot of these transitions easier. Going to NVIDIA was about going to, basically, the other company in the world that has the level of impact on computing and software and high-performance computing, especially, that Intel does. Making the move allowed me to work on things where I could say, "I am still making a huge impact on the world." So I called up a good friend of mine, and said, "I'd be interested in talking about jobs." So they basically said, "Well, we have something we want you to work on." There was a couple of checks where people interviewed me trying to determine whether or not I was in my right mind, because they made it very clear. They're like, "Jeff, it is not a good use of your time or our money to move you to Finland if this is not going to stick. So we want to be really sure that you are making the right choice." NVIDIA, like all big multinational companies, has the ability to move people across the world, take care of immigration, put things in on the boat. They took care of that; that was wonderful. That was a huge part of making it work. The great thing about working for gigantic corporations is that they have the resources to basically solve these problems. You know, they have somebody who's going to do my taxes. I told them I had a problem with health care. And they were like, "Okay, we now have private health insurance for you for three months until you're eligible. And it's been really awesome." I'm still waiting to actually meet them in real life.

Sarah Webb 18:10

Well, I was wondering about that, right? Because you've been there,

Jeff Hammond 18:14

July 2, so July 3, I landed, I was in temp housing for just about two months. And then we bought a house. So we found a real estate agent online. And he basically did iPhone tours of houses we've connected at midnight. It would be 10 o'clock in the morning here. And he would do an open house tour for us. And so we basically bought a house sight unseen from the U.S. with his help.

Sarah Webb 18:44

I do want to ask you about some of the family logistics, obviously, because you're bringing these three small children, your wife. What has this change been like for them?

Jeff Hammond 18:55

My wife and I were on the same page about moving obviously. It's hard. We have family in the United States that we cannot see anywhere near as often. That was a sacrifice; there was no way to get everything we wanted. The good news is hopefully we'll get to see our family in France more often, and we'll get to see our au pair in France more often. So we're really looking forward once things hopefully get back to some sort of new normal, we can go to France every year and see the people we like there. For the kids, school wasn't exactly great with remote Zoom learning and all that nonsense that had to

go on in the U.S. And so the fact that they've been able to go back to school in person and know that everyone in the school over the age of eight is going to wear a mask. They have to learn Finnish, but you know learning Finnish when you're four, eight or 10 is a heck of a lot easier than doing it when you're 40.

Jeff Hammond 19:52

I could go on about the Finnish language. I think it's amazing. But it's also extremely hard if you make very small errors in goes almost everybody knows what you're saying. If you make very small errors in Finnish, there's a couple of words where you can go from good to the HR department is going to be contacting you very, very quickly. And, you know, if you're Finnish, you have a perfect ear. You can hear that, you can say it, you can pronounce the difference between two Ks and one K. That makes a big difference. I'm terrible at that. But the good news is Finnish people are incredibly tolerant of this because they recognize that it's a hard language. And of course, they all speak English. So right now, it's great because I'm so terrible I can't function. But at some point, when I'm in that terrible but functional state, I'm going to have to work really hard to convince people to continue speaking Finnish to me.

Sarah Webb 20:51

In a work situation, does that mean that your meetings are held in English? Are they held in Finnish? How does this work?

Jeff Hammond 20:57

All of our work meetings are in English because not everyone who works in the Finnish office speaks Finnish. There's a couple of Germans; there's two Americans. NVIDIA is an American company, and English is our business language. There's really no variation. Now, it's funny, they do coffee hour. They will speak Finnish until a non-Finnish speaker shows up, at which point they'll switch to English automatically. And they'll do it basically mid-sentence, right? So they'll be talking about, you know, the weather, computer problems, and then the moment I'm connected and my face shows up, everyone switches. The real reason I need to learn Finnish is it's part of the citizenship exam. Permanent residency doesn't require it, but I'd like to naturalize. Parking tickets are only written in Finnish and Swedish. Those are about an hour on Google Translate to figure out what's going on. But short of those sorts of things, it's not a huge issue. The other thing is we live in Espo. And Espo as municipal area has English as an official language. This is not true of Finland as a whole. But within Espo if we require municipal government services in English, they will call me back later with an official government-provided translator. That is one of the unique benefits of being in the town that we are in. It's the western suburb of Helsinki. So we're sort of covered in many ways.

Jeff Hammond 21:52

That's nice. You were talking about that NVIDIA's offices may open up and that you may actually go back to the office when you want to see people. How do you expect things to change?

Jeff Hammond 22:30

The NVIDIA Helsinki office has a sauna. Because everywhere, if you know anything about Finland, everywhere in Finland has a sauna; all the offices have saunas. There's a gym in the building; there's a

kitchen. Turns out, there's what they would call a hotel room. So like basically, if people are tired, they can go take a nap in the hotel room. I will go to the office so that I can go work out in the gym and then go in the sauna and talk to my friends and then eat lunch with them and hopefully practice some Finnish. I will not go there to take meetings. I will not go there, put my headphones on and write code. I will do public transit; I'm not ever going to drive to the office. And I'll go not because I need to go there to accomplish my personal work, but because it's part of engaging with the people I work with. And then-- of course, more importantly-- just integrating into society.

Jeff Hammond 23:37

But, yeah, in the house we bought I have my own office. And it was assumed that I was going to work from home a lot. And actually, part of that is my team is based in the United States. Most of them are on Eastern time. So there is one hour of the day where they are on the clock officially, and I am on the clock. But the reality is, when I'm working with people at NVIDIA in California, I need to be on meetings after dinner. Not all the time, not continuously, but I'm obviously not going to take those meetings in the office. I'm going to be at home eat dinner, clock in, do those meetings at home and then do what I need to do.

Sarah Webb 24:24

Got it. So looking back on the last two years, we had this disruption. I mean, obviously there were lots of difficult things about it. But was there a plus side for you?

Jeff Hammond 24:36

Well as somebody who's been remote for most of my career, or at least remote-first, I have a big fat I-told-you-so for all the idiots out there in tech who think that you need to go sit in a cubicle farm to get your job done. The fact that I don't leave the house, even though I have an electric car, has a pretty big impact on climate change. The fact that I don't get on a plane every single month or two weeks like I used to has a huge impact on climate change. To me COVID should have taught us that big corporate office buildings, gigantic parking lots that these things are stupid. And what we should instead is let people live wherever they want and take all the money that we waste on HVAC office buildings and convert that into people being able to buy a comfy chair or build a standalone office in their backyard or whatever they feel like doing. I do know people who really don't like working from home, but I still think that we could learn a lesson from this and transform society in a way that's more good for the planet, friendlier to pretty much every aspect of life.

Sarah Webb 25:54

I saw something in passing, and there was some report that we saved 63 million commuting hours. I mean, this isn't even talking about energy, or CO₂ emissions or anything else. We're just talking about people's time. (An aside here: I'll note that it was actually 60 million commuting hours per workday in the United States during pandemic lockdown. I've linked to that study in the show notes.)

Jeff Hammond 26:22

Yeah, it's just bonkers to waste all that time. Public transit saves some of that. But yeah, I just don't see the value of doing it mechanically, right? The reason I went to work at Argonne is because I wanted to see the people. I wanted to have coffee with them and whatnot. But the impact of having coffee with

people five days a week versus two days a week doesn't make a difference. Our office has grown since COVID started, and what that means is we don't actually have enough desk space. If we believed in colocation, then we would have to upgrade our office space. Or we just have 25% of the people say, "No, I really don't need a permanent desk." Now if you're an engineer, you need to put an open cabinet computer with soldering boards and electrical oscilloscope. So yes, of course, you need a desk. I told them I don't even want a desk. I just literally want them to tell me that there's a couch somewhere in the facilities. I think we could learn a lot from this. I'm not sure that we will.

Sarah Webb 27:27

It sounds like you, I mean, you have been able to design the sort of structure that you feel like works best for you from what I'm hearing here. Did I understand that correctly?

Jeff Hammond 27:37

Yeah, I'm extraordinarily privileged that I that I have got to set my own conditions. Like when I joined Argonne, I said, "Here's what I'm going to do." And it helped that my postdoc mentor knew my grad student mentors and knew that I had written my Ph.D. remotely, so no one needed to be convinced that I could be productive without someone looking over my shoulder. You know what: You can also show up to work and not actually accomplish anything and go undetected. So, like, it cuts both ways. You could just measure what matters.

Jeff Hammond 28:10

I will also say the other part of this is I'm almost certainly somewhere on the autistic spectrum. And for me, being in an online environment is actually quite nice. I don't do well with some of the body language, nonverbal communication. I really like it that like Zoom makes it clear because there's this two-dimensional representation of a person. And we both know that if it's not on that screen, I can't possibly consume that input. So I can spend more time focusing on writing things and reading things where you either write it or you don't, and there isn't any subtlety there. I work really well in that environment. I do have to, you know, sort of plug it because there's a whole bunch of people out there who are able-bodied and neurotypical and whatever and have perfect life circumstances who think that it's horrible that we all can't go to corporate office space. There's a whole bunch of people out there who are not able to walk the same way everybody else walks or locomote the same way. There's a whole bunch of people who are taking care of family members or who have all sorts of life circumstances where being able to do their job in their home is not just a luxury of wearing pajamas, but just allowing them to be naturally where they ought to be. It's not just stupid and horrible for the environment. I'll just say it's largely discriminatory to say that we need to be in corporate office space. That is making a very significant assumption about how well corporate office space works for certain types of people.

Sarah Webb 29:48

Right. It's an inclusion issue. It's about bringing all kinds of talent into the workplace. Is there anything that you want to add that maybe we haven't talked about related to your move?

Jeff Hammond 29:58

The one thing I guess I'll say is, yeah, I don't think moving from the United States as Americans to Finland is necessarily going to be the choice that everybody's gonna make. But, you know, people should just think about what they really want out of life and go do that. You know, tech is uniquely suited to accommodate these things-- in the absence of idiotic managers. NVIDIA is actually an incredibly remote-friendly company. A lot of people have made the choices like to just do what they want to do-- and whether it's raise horses or live on a farm or move to downtown New York City and have a very tiny apartment. I don't regret anything. I've been very happy with the decisions I've made. But I hope that COVID has taught people like you really only do live once. And if you're only going to live once and some stupid pandemic might kill you tomorrow, you might as well at least live out whatever time you have somewhere that makes you happy.

Sarah Webb 31:02

All right. Well, Jeff, thank you so much for your time. This was a pleasure. It was a lot of fun, and I really appreciate it.

Jeff Hammond 31:10

Cool. Thank you.

Sarah Webb 31:12

To learn more about Jeff's HPC work please check out our show notes at scienceinparallel.org. Science in Parallel is produced by the Krell Institute and is a media outreach project of the Department of Energy Computational Science Graduate Fellowship program. Krell manages this program for the U.S. Department of Energy. Our music is by Steve O'Reilly, and this episode was produced and edited by me, Sarah Webb.