Episode 53 | Chris Bhatla Pt. 2

Sarah Smith 0:10

So getting into more specifics, sort of about projects, I've heard about a very well-known guitar table that I understand you are involved in designing and building. So I'm wondering if you could tell us a bit about that project and sort of how it started and how it went.

Chris Bhatla 0:29

So I believe the project initially was requested by the Vancouver Adaptive Music Society for basically to have a table that could support a guitar, but not just any guitar, but sort of whatever type of guitar the person who was going to be playing had, which meant not just a specific one, it had to be modular, and it had to also conform to the needs of whoever was going to use it, so, for example, changing height and those kind of things. And so they had come and brought that project to Tetra Society. And then the way that projects typically got get assigned through Tetra Society is there'll be meetings every month, and then available projects will be dispersed to different Tetra Society volunteers. And as it happened, I had been working on quite a few projects that were related to either like a stand or table or some kind of support for musical instruments. So then it seemed like this would be a good fit for me to take on. So that's how I ended up with that project. And then as well, I believe there had been some previous very similar designs, and so that kind of provided the original inspiration, both for VAMS, but also for me as someone designing it, to be able to already kind of have a little bit of a starting point of what we we wanted this to be. So this is actually one of the really good things about Tetra society, is that they have one entire database of all the previous projects, and there was already a guitar table that had been created in the past that worked really well and was amazing. And and that's kind of what was the inspiration for this. The main difference was that original guitar table was just for one person, and so it was designed sort of with them in mind, but not to be used for just whoever happened to be wanting to use it. So that was what I kind of had to build off of, which made it much, much easier than if I was just trying to do this completely from scratch. So then I essentially took that design, which was essentially a metal table top which then was placed on a originally like a stand for a keyboard, which could be changed a little bit in terms of the height. And then there were some other components attached on top of the metal frame that would hold the neck of the guitar. And then, along with some sort of some supports for the body of the guitar, so that, as someone's playing it then it wouldn't move, and it would be held in an ergonomic position. The main changes I made were creating the neck holder to be more modular. So rather than just a single fixed piece, I

came up with this design that could be like the width and height that could be changed just by making some 3D printed components that were screwed together and then for one of the tables, because I ended up actually making two of these, but for one of them that was going to be permanently in the VAMS studio and not needing to be transported around, we wanted to make it so that the height could be adjusted just with the press of the button, rather than the previous way, which involved a little bit of extra work, or fiddling around with this manual stand. So I ended up actually kind of, rather than trying to reinvent the wheel, I found a standing desk that came without the tabletop. So it was just a standing desk, and you were supposed to add your own wooden top to that. But instead, I just put the put the guitar table on top of that, and then that worked really well, because then it just had its own control already, all the motors, everything was already built in, and that allowed it to go up and down and essentially meet whatever height it needed to be. So that's kind of the gist of it. That was, that was probably one of the most fun projects I worked on.

Sarah Smith 4:45

Yeah, very cool, very cool. I find it so interesting that a lot of the time in conversations that I've had with people, I've noticed that a lot of the time these, like adapted devices that people are working on or making, are really, like you said, not reinventing the wheel, but sort of being creative and resourceful with what's already out there. Like you said, a standing desk that can move up and down with controls. That's such a smart solution. And it sounds simple and yet not simple to sort of come up with, because it doesn't exist in this context. But yeah, very cool. I just find that so interesting.

Chris Bhatla 5:27

Yeah, and I found that with other projects as well, because compared to some of the other volunteers, who are just amazing at building things from scratch and have those machine shops and know how to use all the tools really well, that wasn't really an area I was very strong in. And so, I did for quite a few projects, take something that already existed and just kind of tweak it and make little changes. And you can sometimes get a lot with that.

Sarah Smith 5:51

Yeah, yeah absolutely. And it kind of makes sense, because I imagine a lot of folks aren't equipped with tons of tools and big garages that they can sort of work in and play with to start from scratch, and so it's an easy fix to work with what's already out there and then find creative and inventive ways of restructuring or reformatting or sort of pulling different things together. That's really, really cool. Okay, so we mentioned the guitar table project.

Learned about that. I'm wondering sort of if you could talk about maybe some other projects that were most memorable or most challenging for you.

Chris Bhatla 6:28

Yeah, so that one already was definitely one of the most memorable. And then I say another project that sticks out for me was one where the goal was to create a system that would allow the user to basically have like a sort of office built into a scooter. The client here was a guy who had a stroke and was regaining a lot of function and was hoping to go back to work, but still did need a scooter to get around, and so we wanted to be able to work at his scooter, rather than having to use like a separate computer, and have that challenge of trying to figure out how to do that. So instead, what he wanted to be able to do was to have essentially a desk that would kind of pop out on the surface of of the scooter. So while he's sitting on that, he's able to to do work. And so essentially was an iPad that he had with a keyboard that was acting as his computer. So for that, I had to figure out a way to create this surface that could be used as a desk, but also could fold away and be compact and not getting in the way when he needed to then move around and and get around on the scooter. And so that ended up being quite a challenge, because to create something compact that I can kind of fold out and be used, but still be very stable and functional involved, it's sort of almost a trade off of trying to get something that's stable and a good desk surface, but also can disappear and be out of the way when you don't want it. And so for that, I ended up again kind of having to get some extra outside help. I, again, did a similar thing where I found this iPad stand that was quite secure and was able to hold an iPad in a fairly good position, but it just was supposed to stand on a tabletop or something. It wasn't supposed to attach to a scooter. So I had to figure out how to attach this iPad holder thing to a scooter ended up working with a place called MakerLabs in Vancouver, and it's kind of a place where you can go and use their equipment or get some help from the employees who work there, then they like they charge for that, because it's those people working there doing it as their job, rather than Tetra volunteers, but it's basically a workshop space that I went to and got them to build an adapter that I had designed, and then connected the iPad holder thing to the scooter. And then there's some other components that we kind of had to integrate to make this like sort of workspace desk that just like popped out and then folded away. And in the end, I think it worked fairly well. There definitely could be some improvements if we were to do a round two of that. But it was just really fun, because it it was quite challenging trying to balance all those different trade offs.

Sarah Smith 9:43

Yeah, that definitely sounds like a bit of a puzzle to solve in terms of what you can afford to, like, you said, sort of trade off, and what you can benefit from on the other side, that's really interesting. And again, like using something that already exists, the iPad holder stand. And just sort of refitting it to function for the needs of that individual. Very, very cool in terms of projects generally. Are there sort of recurring ones that folks tend to ask for frequently, that you end up making devices to solve for more commonly?

Chris Bhatla 10:17

I think there probably are. I'm not really sure specifically which ones would be the most common just with I don't think I've done enough variety of different projects to have a great idea of what kind of things are most commonly asked for. And it's also hard to say, just because there is a huge variety of what's out there. Before for this call, I was just browsing through Tetra base and just trying to get an idea of what kind of things there were and what stuff's most common. But even doing that, it was hard for me to say, because it's just there's just so many different possibilities. Specifically in Vancouver, some of the things that I noticed tend to be requested, a lot were devices related to sports so helping to either adapt equipment or enable sports to be played in a certain way when otherwise it would have been challenging to do. So those are, those are pretty common, and then often things related to just getting around and mobility, things that are, for example, making like a step, but that's very specific to someone's living situation and house, or ramps and those kind of devices where you can't really go and just buy one off the shelf, because it's this very custom thing that needs to be done. And really that applies to almost everything is that it's very individualized and personalized. Because if it's not, often there would be something out there if it was something that everyone needed the exact same thing, then some company probably would have gone on and made mass produced it. So for that reason, every project is kind of different.

Sarah Smith 11:59

Yeah, yeah. That makes sense. I mean, everyone has their own, their own need, and however their disability is affecting their ability to to work with whatever challenge they've got. So that that makes sense. But the sports thing I find interesting, and it also makes sense, being that Vancouver is a very sort of outdoorsy, sporty city, I can see that that would be a common request as well. I have sort of, a couple of more questions that shift a little bit away from the project and more about Tetra itself, and sort of what role it plays. This one's a bit of a two-parter, so I'm wondering, first of all, what impact do you think Tetra has on the community, and then on the other side, what impact it's had on you through your time volunteering?

Chris Bhatla 12:39

Yeah, yeah. Well, on the community, you know, I hope that it's made a positive difference in many people's lives, and I think that's the case just from the few people that I've worked with, which is just a tiny sub segment of the overall community that Tetra's kind of been part of their lives. And so just from the few people I worked with, even just really small little projects that could be done in a day or an afternoon, I found that people were just really appreciative that someone took the time and volunteered their own time to help out in whatever way it was, whether big or small. And which made me feel like, you know, that my time was really well used in working on those projects, because it did make a difference in someone's life. And so that's kind of flipping it around then in terms of how, how it affected me, I think being able to see that change and that that positive impact really made it worth, worth my while, and made me glad that I was working on projects, and then I also learned just so much from them, just both from that technical standpoint of building things, but also just from the experiences and the interactions with everyone that I was working with that I think just had a positive impact on me. Yeah, so it's been, it's really great organization to be involved with.

Sarah Smith 14:13

Well, that's lovely. I think that's a beautiful note to end on. Thank you so much for meeting with me today and sharing a bit about your experience volunteering. This was a really interesting conversation, and I loved to hear about all of the projects. So that's awesome. Yeah, thanks again for for joining me.

Chris Bhatla 14:31

Thanks for having me.

Sarah Smith 14:33

And to all of our listeners, thanks for tuning in today. We hope you join us next time on Discover Stories.