3D printed shoe resources

Medieval Moccasins

We began with a local company Medieval Moccasins https://medievalmoccasins.com making leather shoes for us. We continue to actively work with this company on leather shoes. We are able to wear them in water if needed. Downsides: Not weather proof. Slow manufacturing time. Lacing system has evolved over time. We pay roughly $100-$150 per pair.


PreVolve

We learned of the 3D Printed shoe company, PreVolve in Seattle from Lauren B in the Facebook Group. We travelled to Seattle to meet with PreVolve, and have Ryder's feet scanned. We paid $500 for one pair of shoes.


They were awesome, and lasted over a year on the feet of a two year old with me repairing them along the way. Unfortunately, they went out of business, and are no longer able to make shoes.

Local Manufacturing Company

From here we began working with a local manufacturing company to try to duplicate/improve the PreVolve shoe. We are now working on prototype version four, and are getting close to a wearable shoe. Currently, this is not scalable to other families.

V2 

V4 

We also began working with two “established” companies after Pre-Volve.

Fused Footwear

The first was Fused Footwear, https://fusedfootwear.com. We’ve been working with Philippe Holthuizen, owner of Fused Footwear, based in Hong Kong, for a little over a year. We paid him $500 for three prototypes to end up with at least one pair of working shoes. At that time he indicated he would charge us $100 per pair after that. To begin working with Philippe, a foot scan is needed. We bought a Structure 3D Scanner from Occipital to work with our iPad. The scanner and software were roughly $500. There is a decent learning curve to making your own scans. From there, it took us three revisions to get a pair of working shoes. The fit of the third pair could be better, but we had to hold development while Philippe travelled to Europe for several months. We got about six months of wear out of the third pair. We still wear them, but they are very worn now.

V2 - New 

V2-New 

V3 - Four months wear 

This month Philippe returned to Hong Kong, and we are now negotiating on a new pair of shoes with my latest suggestions for fit and durability. Unfortunately, he is now quoting us higher prices, up to $300 per pair of completed shoes from $100. I've inquired about the possibility of developing a pair of soccer cleats, and water shoes. He is currently quoting design/development time at $90/hour. He indicates he is willing to work with additional families, but negotiating a fair price may be a challenge, as he is currently quoting $2100 for the first round of development on a new pair of shoes. This is much too high in my opinion, and I am discussing other scenarios with him.

Unis Brands

We are also actively working with Nick Unis, founder of Unis Brands, a 3D Printed Footwear startup in Pittsburgh, PA. https://www.unisbrands.com/ Nick's initial designs are similar to a Birkenstock style sandal. We have completed our first prototype, and are close to a working pair. Nick is also working on several 'shoe style' prototypes that we will begin working on after the sandal is completed. To work with Nick I had to have foot casts made, and then pour molds out of urethane. I shipped him the molds, and he

was able to scan them. Moving forward, he may be able to use provided footscans. So far, we have paid roughly $500 for this work. Nick has indicated he is willing to work with other families. I haven't discussed pricing for this with him.

Chacos

We were able to find a cobbler in Austin who worked with us to make these "Chacos." We paid her about $200. They are fairly easy to make with practice, and the correct tools. We will soon make our first pair solo.

Finally, we found these plans on Instructable. I haven't made a pair yet, but it looks promising.

https://www.instructables.com/id/Modular-Shoe/

If you'd like to connect with this family about 3D shoes, please email Kristen at CLOVES Syndrome Community at kristen@clovessyndrome.org and she will connect you.