#### Moses "Moshi" Turner

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# **Industry Experience**

## **Associate Software Engineer**

May 2021-

Collabora

- Wrote Monado's optical hand tracking, learning computer vision fundamentals, machine learning, artificial dataset generation, real dataset collection, statistics and C++ from scratch over a very short timespan.
- Helped write Monado's SLAM infrastructure.
- Wrote and improved many hardware drivers.
- Contributed to OpenComposite, libsurvive, StereoKit and many other FOSS projects along the way.
- Mentored a Google Summer of Code student.
- Wrote blog posts and Twitter posts promoting Monado and Monado's hand tracking.
- Regarded as "the demo god" (their words not mine) for constantly producing live and recorded demos that showed off various pieces of Monado, including our SLAM and hand tracking.

**FOSS Hacker** March 2020-May 2021

Project North Star

- Wrote most of Monado's North Star driver, on top of some minimal initial work from Nova King.
- Wrote Monado's "ultraleap v2" driver from scratch.
- Helped get StereoKit working on Linux.
- Built many hardware prototypes, iterating on a custom Project North Star headset about 40 times.
- Wrote several display calibration methods for the North Star headset's displays.
- Did some initial work building+evaluating various open-source SLAM implementations.

#### Education

#### **AAS** in Mathematics

May 2018-Dec 2021

Austin Community College

- 3.7 GPA
- Started at age 15, graduated at age 17.

#### Skills/Values

- High skill in C/C++ and Python. Intermediate in Rust, C# and web development, and I can pattern-match most other programming languages.
- Strong background in calculus, linear algebra, statistics, machine learning, data science, and low-latency machine vision.
- Pretty good at searching for, reading and understanding ML and pose estimation papers.
- Once fluent in German; could get this back very easily. Basics in Hindi, French, Spanish, Portuguese. Trying to get fluent in Mandarin as fast as I can!

- Extremely hard working, extremely quick learning.
- Systems thinker; obsessed with going up and down levels of abstraction.
- About a decade (since I was 9!) of experience using Blender and its Python API for 3D art, and about a year of using it for data generation.
- Coming up on a decade of Linux experience. The first time I installed Linux was when I was 11, and the first time I built the Linux kernel myself was when I was maybe 12-13.
- I care about results! I want to ship products that help make peoples' lives better. Nothing's above or below me in achieving that end.

### **Conference Presentations**

"Introducing Monado's Hand Tracking," FOSS XR, speaker and organizer. Minneapolis, MN., October 2022.

### References

Mateo De Mayo, Associate Software Engineer Collabora

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"JC" Corvinus\*, Senior Designer ex-Holos, VRChat dude.dudeness@gmail.com

**Jakob Bornecrantz**, Senior Software Engineer ex-VMWare, Collabora jakob@collabora.com

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<sup>\*</sup> I have only worked informally on FOSS projects with this person.