

ORIGAMI XR INNOVATION HIGHLIGHT



COMPANY OVERVIEW

Origami XR is a technology company that offers a software service for spatial computing (XR) experiences. The experts at Origami XR are devoted to streamlining the process of converting 3D files to XR. To do so, they've developed a cloud computing tool that makes it easy to create and share virtual environments through the browser.

LOCATION: TORONTO, ON

TECHNOLOGY



Data Centre and Cloud

Erik Peterson, Founder



WHAT VR/AR SERVICES LOOK LIKE NOW

Multiple industries rely on 3D data to make high stakes decisions. Currently, the services available to convert 3D files like lidar scans to shareable VR/AR are time consuming and expensive. Adding more frustration, many services can't generate universal files, so they aren't viewable on all devices.

For these three reasons, the current market is underserving industries that could benefit the most from its services, such as construction companies.

ACCESSIBLE VR/AR EXPERIENCES

Origami XR is dedicated to making complex technology accessible. This is why they set up their spatial computing experience service to be seamless, even having users upload their file to the Origami XR website. By optimizing their solution's platform, Origami XR was able to automate the creation of fully walkable, spatial experiences for the end user. These virtual environments can also be shared with a simple, lightweight, universal, web link. This link allows the experience to be viewable on any device, including a headset, tablet or mobile device.

OPTIMIZING PERFORMANCE

Origami XR set up their application in a CENGN test environment and adjusted parameters for both low and high-resolution data, determining optimum configuration. They were able to verify deployment scripts for Linux, and using the Testbed's multi-GPUs, they identified that 18 cores are required to execute their basic data set within 1 hour. As well, thanks to abundant cloud resources, Origami XR identified their upper performance bound to be 44 CPUs. This discovery allows them to operate an optimized environment and exposed which parts of their code could be improved. They can now better predict costs of delivering service, provide educated estimates for new customers and clear timelines on turn-around. "This project has created a much clearer path to scaling our operations and understanding what it will cost to do so."

> **Erik Peterson** Founder, Origami XR

