



### Keizus Inc:

Smartphone tripod gives start-up solid “legs” for growth



**Who hasn't taken a picture or video of themselves and been disappointed with the result? Photos with heads cut off, images that are out of focus, videos with too much shaking... they all fall victim to the 'delete' button. Sometimes it's mildly annoying. But often it's downright frustrating because a precious moment or memory is lost.**

Keizus Inc., a Toronto-based start-up that designs and sells accessories for smartphones, tablets and cameras, had plans to develop the Quadrapod + Clamp to eliminate such hassles. It's a plastic tripod device that looks like a human skeleton with extremely flexible joints that can be moved into an unlimited number of positions to securely hold and mount smartphones, tablets and cameras. It's ideal for taking great self-portraits and videos, and for watching video content on tablets.

### VISUALIZING THE QUADRAPOD + CLAMP

But before Keizus could make its product market-ready, it needed help developing 3D prototypes in a short period of time.

“We needed to visualize the product,” said Keizus Chief Technology Officer, Alex Zouev. “You can simulate product design on a computer, but there comes a point where you want to see it and touch it with your hands.”

“This type of 3D printing equipment is normally reserved for large companies,” said Dr. Farzad Rayegani, Associate Dean of Sheridan's School of Mechanical and Electrical Engineering and Technology. “No other post-secondary institution in Canada has this system. The 3D printing of advanced functional prototypes is often the missing piece small and medium companies need to move forward.”

Sheridan's cutting-edge resources certainly advanced Keizus' design, as only after a 3D model was in his hands did Alex realize critical revisions had to be made.

Keizus partnered with Sheridan College through the Federal Economic Development Agency for Southern Ontario (FedDev Ontario) Applied Research and Commercialization (ARC) Initiative.

The ARC initiative matches small- to medium-sized companies with Sheridan faculty and students to conduct applied research, development and innovation activities that help companies become more productive, competitive and ultimately create jobs. (Funding of up to \$100,000 is matched by 50% in cash or in-kind contribution by the participating company.)

### 3D PROTOTYPING AT SHERIDAN

Under instructor guidance, Keizus worked with Monika Kucharska, a student at Sheridan's School of Mechanical and Electrical Engineering and Technology (MEET) who made adjustments to the prototype design, prepared drawings of parts for manufacturing, worked on packaging design and assisted with some of the 3D printing.

Fellow student Amanjot Singh helped design fixtures to be used in the products' manufacturing and assisted with the 3D printing as well. The project gave both students invaluable exposure to the task of engineering product design while considering manufacturability.

### CREATIVE FREEDOM AT WORK

Alex was impressed, and a bit envious, of the students' creative freedom. When brainstorming, "they didn't have to worry about budgets, markets or investors," said Alex. They could just freely exchange innovative ideas without outside

interference, and that, stressed Alex, is why they made such a positive contribution.

**"Working with Sheridan was fantastic – their resources are readily available and it has one of the most sophisticated facilities for printing in 3D."**

**- Alex Zouev, Chief Technology Officer, Keizus Inc.**

The culmination of everyone's efforts was the commercial launch of the Quardrapod + Clamp in July 2013. Weighing just 0.3 pounds (120 grams), it's small, light and ideal for smartphones such as iPhone, Samsung Galaxy, HTC, and Sony Ericsson. It's also perfect for viewing tablets like Apple's iPad or the Samsung Galaxy Tab.

For Keizus, Sheridan's resourceful faculty, advanced 3D printing equipment and enthusiastic students were picture perfect.



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Can Sheridan help you solve a problem? Contact us today to get started:  
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