

Javelin and Sheridan:

New "sneak peak" at shooting in 3D



Whether it's for movies or video games, shooting or developing material in 3D is expensive. Film makers and game designers know how easily three dimensions can add a whole new dimension of costs.

To ease budgets and tension Javelin Reality, the Virtual Reality department of Javelin Technologies, set out to develop a prototype for its "Previz" (previsualization) program.

This software program can help film makers and game designers test and review scenes on their computers, giving them a "preview" of their 3D material before using specialized 3D equipment. This allows designers to construct a scene, arrange characters and sets and select camera angles, saving valuable time and money.

Javelin Reality didn't have the expertise to develop this product in-house. This challenge set the stage for a partnership with Sheridan College and FedDev Ontario's (Federal Economic Development Agency for Southern Ontario) Applied Research and Commercialization (ARC) Extension 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 a 50% cash or in-kind contribution by the participating company.)

"Sheridan College was a great fit," said Javelin Reality producer Ben Sainsbury. "They have an international reputation as one of the world's best animation schools. And the FedDev program definitely helped offset some of the risk of pursuing this new business venture."

Sheridan assigned three programmers and a project manager from its Faculty of Applied Sciences and Technology (FAST) to work with

Javelin Reality over the summer of 2012. Each brought a unique set of skills to tackle a crucial element of product development.

One developed a motion capture tool that records body movements that can be applied to animating characters within in the program. The second worked on creating realistic virtual cameras within the program, so designers could get a preview of a scene from a camera on the ground, or perhaps from a crane. And the third ensured the cameras behaved properly inside the program and developed editing options to tie all of these tools together.

"This was really an opportunity for the students to get involved in what they would do if they worked for a game company," said Kevin Forest, a Sheridan professor with FAST.

He was impressed how his students applied their skills from the classroom to an industry problem. "A month into the work, they're not asking questions when they get stuck, they're realizing that with the skills they've learned, they can fix their own problems."

Wanting to work side-by-side with the students, Javelin Reality even moved into Sheridan's Applied Research and Collaboration Centre so that they could offer immediate feedback and maximize this partnership. That partnership included a bonus – going beyond the project scope, the students also created a mobile application that turns an iPad into a virtual camera.

Javelin has since demonstrated their prototype to a large online software distributor that intends to carry the company's software tools. With a distribution channel in place, the company has hired a Masters level programmer to help take the project from the prototype stage to a finished sellable product that's expected to be on the market in 2013.

"Javelin Reality is thrilled with our collaboration with Sheridan who was pivotal in the development of a working prototype of a solid product we plan to launch next year." Ben Sainsbury, Producer, Javelin Reality



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