

Patrick McKenna

a promising
career that spans
dimensions



Computer programmer Patrick McKenna shares the same name as the Sheridan College graduate who is best known for playing Harold Green on the popular television series, *The Red Green Show*.

But the two couldn't be more different – while the elder Patrick does his best work in front of the camera, the younger Patrick excels behind the screen.

Patrick first completed a Bachelor of Computing from Queen's University in Kingston in 2009. This was followed by a Master's degree in informatics in 2011 through a joint Master's program split between the University of Edinburgh in Scotland and the University of Trento in Italy.

"I jumped at the chance to live abroad for a few years," said Patrick. "And I've wanted to work with computers since I can remember."

But before he had finished his thesis, his partner returned to Canada and began working at Sheridan College and noticed a job posting for a part-time applied research project.

"It was perfect, as a part-time position, I was able to start working while still completing my school work," he said. "I sometimes found it hard to make progress on such a large project working on my own. The research at Sheridan really helped get the productivity flowing."

The fall 2011 project connected him with a technology company called Spatial View and with Sheridan through the FedDev (Federal Economic Development Agency for Southern Ontario) Applied Research and Commercialization Initiative (ARC).

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.

As a senior software developer, he worked on Auto-stereoscopic 3D screen technology – a 3D display that doesn't require glasses. He helped develop the technology that enables a video screen to produce a 3D image, no matter the angle the viewer looks at the screen.

Move your head from side to side and you still see the images in 3D. (A webcam tracks the location of your face relative to the screen and controls which images are being projected towards each eye, so the images always appear three dimensional.)

With the technology successfully launched and Patrick's talent apparent, Patrick was then offered the role of project manager and lead programmer for another FedDev project with CSE Games.

CSE Games wanted to develop a mobile version of its award-winning board game *Gridstones*. (This abstract strategy and pattern matching game involves players adding and removing stones from a grid to create patterns that match patterns on accompanying playing cards.)

Patrick helped the students take *Gridstones* in new digital directions, such as devising a way of playing the game as a single player, creating different difficulty levels and other features.

With *Gridstones* expected to launch in early 2013, Patrick then moved behind the big screen again working on another FedDev project that involved helping develop a prototype for *Javelin Reality* and its "previz" (short for previsualization) program.

This software program helps 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.

Also expected to be on the market in 2013, this technology allows designers to construct a scene, arrange characters and sets and select camera angles, saving valuable time and money.

In addition to the wide variety of cutting edge technologies, the FedDev projects have also given Patrick exposure to the fields of managing and mentoring.

"I really enjoy helping students develop their skills and keeping them focused," he said. "I hadn't experienced that role before and it's added another dimension to my skill set."

So polished is that skill set, Patrick started teaching his first web development course at Sheridan in the fall of 2012.

Would he like to do more FedDev projects? Definitely. He would love to continue working with Sheridan which he described as "full creative people with great connections with industry."

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