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ArchVision™

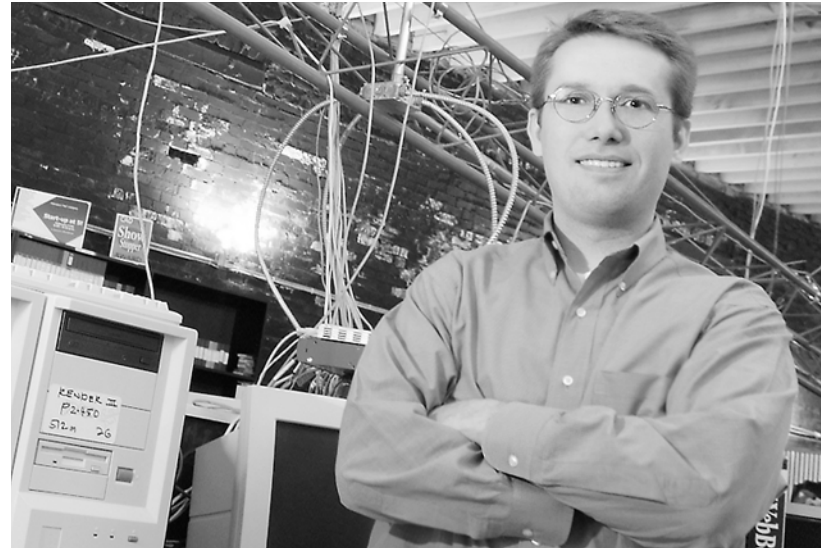
FOR ALL OF YOU NOW reading this who associate the term '3-D imaging' with having to affix a pair of those red & blue cellophane cardboard 'glasses' to your face to actually see something tri-dimensionally, here's news: An innovative, entrepreneurial firm headquartered in downtown Lexington has completely revolutionized the concept of 3-D imaging, worldwide.

The company is ArchVision, Inc., a software development group founded in 1991 by Pikeville native and UK College of Architecture graduate Randall Stevens. Initially, Stevens explained, he was focused on 'bringing architectural drawings to life' because of his fascination with CAD (Computer-Aided Design) software he worked on while a student at UK. After graduation, he incorporated ArchVision and worked with the Hammond Productions group, primarily on developing visual tools to enhance fund-raising efforts for non-profit groups. "We wrote a software system which, when coupled with computer visualization we produced, allowed the University of Louisville Athletics Department to convert season ticketholders in their old stadium to new season seats at the Papa John's venue, totally on computer," Stevens began. "We were able to show each fan exactly what the view of the field would be in his or her new seat, and that view was shown on 3-D animation to the purchasers of over 12,000 tickets in just five weeks." According to Stevens, the power of 'real time' visualization was also used for materials for other non-profits to 'bring to life' the interior of a proposed new church sanctuary, a new library, or whatever else was requested.

In 1998, as a small independent business, ArchVision developed (and began to market to architects)

image-based rendering technology which put realistic people and trees into computerized presentations. "I knew that there was an opportunity in the market for a solution for incorporating organic objects such as people and trees within design visualizations," he explained, "so we picked 3-D Studio, an existing software system from Autodesk, Inc. which we knew had better than 150,000 users worldwide, and we created our first software as plug-ins to that system. Our images were easy to incorporate, had a small learning curve, and they became very popular, very quickly," he added.

So much so that the initial ArchVision offerings titled "Business People" and "Trees" had users demanding more variety. So, the company grew its staff and began creating 'libraries' of more diverse images (there are more than 50 different titles currently available) with a resultant corporate shift in focus to becoming the premier provider of such visual '3-D clip art' worldwide. These visuals, known as RPC Technology (rich photorealistic content) are now THE standard by which all others are compared. Technically speaking, the basic idea behind RPC is to utilize image-data instead of geometric or polygonal data to represent complex objects. For those who don't understand those terms, a simpler explanation: an object (a person, a tree, a flower, a piece of furniture) is placed on a slowly revolving pedestal and is photographed sequentially as it rotates. The images become part of the appropriate software library, having been synthesized so as to show the correct view of the object to the camera. Thus using 2-D images to create the illusion of reality, a 'computer-generated tree' could require a million or more polygons to appear photorealistic, while an 'RPC tree' requires only a single texture and polygon per frame... "simpler, easier, faster, less expensive, and usually much better, too," Stevens smiled. Until just recently, ArchVision was headquartered behind a door with no signage over an after-hours



ArchVision CEO and founder Randall Stevens.

bar downtown. They put their logo on the door last week, "We do most of our business worldwide, and we do it over the Internet-so we don't need overly client-friendly 'digs' to do what we do," Stevens noted. "And so you can go to our site, RPCnet.com, and see exactly what we have to offer to solve whatever challenge you may be facing. We communicate with and support thousands of customers with a staff of just 14, right here. Couldn't happen without the Web," he added.

ArchVision's connections to the University of Kentucky are numerous. Recently, the company invested proceeds it received from a City/Lexington United grant for entrepreneurs to help fund studies into enhancing graphics research being done by two UK grad students in the CompSci Department. "It's a win-win situation," Stevens noted. "Funding studies on campus gives their researchers practical application experience, as well as a 'feel' for entrepreneurialism." He also mentioned that during his own initial research on trees for RPC imaging, he discovered that one of the most renowned authorities was Dr. Tom Kimmerer, a former UK Forestry Professor and now president of TreeGuide, Inc. Melding Dr. Kimmerer's knowledge and RPC technology has 'given birth' to

numerous new applications for software: for forestry management, for simulating golf course designs for builders, for folks who create hand-held games, and for military applications for simulated training of personnel in jungles, etc. Plans for the future? "We haven't even 'scratched the surface' beyond architectural usages," Stevens said. "We're exploring using RPC for gaming development, for virtual visual catalogues which will show a 360 degree 'surround' image of the products being offered for sale, applications for video and film, and moreall from beautiful downtown Lexington, Kentucky!" he concluded. And, as one 'fan' of ArchVision's technology added "It's just like having George Lucas right down the street."

Lexington United's President Terry Burkhart noted, "ArchVision is a great local story of a UK grad who not only stayed here but also founded and grew a world-class technology company, right in the center of our downtown. And the use of our Entrepreneur's grant to foster a research relationship with UK is a very positive move, as well!"

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