David Gould Software Development References

• Registered AutodeskTM ADN Developer

I have over fourteen years of experience as a computer graphics programmer. This includes both custom plugin development, catering to the internal needs of companies, as well as commercial products that sell internationally. I have experience working both internally with companies and also as a freelance developer.

CEL AND TECHNICAL ILLUSTRATION RENDERER

This project was instigated by myself. I designed and implemented a cartoon and technical renderer plugin that allows for both hand drawn and pen-ink illustrations. It includes such features as hidden-line removal as well as supporting different brush shapes/sizes and linestyles. It also outputs a rendered image to vector format for use in other vector programs such as Macromedia Flash, Adobe Illustrator and Autocad.

Illustrate is used by some of the world's leading companies including Walt Disney Imagineering, Sony Pictures Entertainment, Aardman Animation Studios, IBM, Microsoft, NASA, MGM, Lockheed Martin, Westwood Studios, British Aerospace, Ex Machina, and many others. Some of the leading universities and institutions are teaching Illustrate including Sheridan Center for Animation and Emerging Technologies (Sheridan College), California State University, Pratt Institute (New York), University of Montana, Brown University and many others.

It has also been showcased in the following publications:

Books

3DS MAX 4 Magic by Sean Bonney, published by New Riders Publishing.
Flash 5 Studio by William Spencer, published by Friends of Ed.
3DS MAX: From Models to Movies by R. Shamms Mortier, published by Charles River Media.
Webmaster Dreamweaver, Flash & Fireworks by Erik Mansvelders, published by Sybex, The Netherlands.
Flash 4 Bible by Robert Reinhardt, Jon Warren Lentz, published by IDG Books Worldwide.

Magazines

DIGITAL PRODUCTION MAGAZINE Sep 1999. KINETIX WORLD MAGAZINE Feb 1999. COMPUTER GRAPHICS WORLD MAGAZINE Dec' 1997 "Different Strokes"

Company: *Digimation Inc.* Contact: Beau Perschall (Vice President) E-mail: <u>bpersch@charter.net</u> Phone: (985) 674 0031 Address: 134 Trace Loop, Mandeville, LA 70448. USA Website: <u>http://www.digimation.com</u>

Illustrate™

Entropy Renderer	
	FILM-QUALITY PHOTOREALISTIC RENDERER
	This renderer was designed as a hybrid scanline-raytracer. It was capable of handling complex geometry, with sub-pixel displacements, and user defined shaders. It was also capable of advanced raytracing, including global illumination, caustics, area lights, etc.
	Company: <i>Exluna Inc.</i> Contact: Larry Gritz E-mail: <u>lg@exluna.com</u> Phone: (510) 489 0973 Address: 1900 Addison St, Suite #200, Berkeley, CA 94704. USA Website: <u>http://www.exluna.com</u>
Entropy for 3dsmax	3DSMAX TO RENDERMAN TRANSLATOR
	This product converted the 3dsmax scene to RIB for rendering with the Entropy Renderer. It converted all the geometry, light, cameras, etc to the equivalent RIB statements. It also handled generating Shading Language (SL) shaders from all the 3dsmax materials. It was designed to be used by non-technical artists, so handled all the preprocessing and render execution transparently. Company: <i>Exluna Inc.</i> Contact: Matt Pharr E-mail: <u>mmp@exluna.com</u> Phone: (510) 489 0973 Address: 1900 Addison St, Suite #200, Berkeley, CA 94704. USA Website: <u>http://www.exluna.com</u>
Mango	MAYA TO GELATO TRANSLATOR
	I developed the latest version of this Maya plugin/scripts that converts geometry, shading networks, lights, etc into Gelato's own .pyg format. It allows the user to render directly from within Maya as well as export .pyg files for later distributed rendering. I added many enhancements and graphical user interface features to better integrate Gelato into the Maya program. Company: <i>NVIDIA Corp.</i> Contact: Larry Gritz (Project Manager) E-mail: <u>lgritz@nvidia.com</u> Website: http://www.nvidia.com

PHYSICAL DEVICE DRIVER AND TRANSLATOR

I was required to design and implement the latest version of the Monkey plugin which allows a user to animate a Monkey (mechanical puppet) and have that animation translated into 3DS MAX. This work focused on creating import methods for the Monkey data as well as creating custom controllers for the monkey appendages.

Company: *Digital Image Design Inc.* Contact: Greta Peterman (Product Manager) E-mail: <u>greta@didi.com</u> Phone: (212) 343 2442 Address: 72 Spring St, Floor 6, New York, NY 10012 4019 USA Website: <u>http://www.didi.com</u>

LaserShow Converter!™ 3

Monkev™

3D TO 2D LASER GRAPHICS SYSTEM

I was responsible for the design and development of this product that generated animated 2D vector laser paths from a scene consisting of 3D objects. It would take complex 3D models and convert them into simplified 2D vector artwork that was suitable for display using a continuous laser beam. The system could render the models in a large variety of artistic and technical styles. Clients typically use this system for the creation of animated shows or presentations that project laser images onto walls of water, smoke, etc producing unique and spectacular laser effects.

Company: *Pangolin Laser Systems, Inc.* Contact: William Benner (Vice President) E-mail: William Benner@email.msn.com

Phone: +1 407 299 2088 Address: 771 S. Kirkman Road, Suite 113 · Orlando, Florida 32811, USA Website: <u>http://www.pangolin.com</u>

"The DNA Story" film PROCEDURAL ANIMATION SOFTWARE

This project required the creation of custom animation plugins. Many of the complex inner workings of the human cell and how they separated couldn't be animated by hand. I developed several plugins that allowed for the coiling and twisting of DNA strands. I also created several custom material plugins for making objects transparent with distance. This project had the unique requirement that the film was produced in stereo for viewing with polarized stereoscopic glasses.

Company: *Digital Studio SA* Contact: Laurent Larsonneur (Chief Technology Officer) E-mail: <u>llarsonn@digitalstudio.com</u> Phone: +33 1 42 60 42 60 Address: 12 rue Vivienne, 95012 Paris. FRANCE Website: <u>http://www.digitalstudio.com</u>

Visage	FACIAL ANIMATION SYSTEM
	The method I developed for animating faces was awarded a patent (FILED: 9^{TH} APRIL 1998 APPLICATION NO: GB 9807899.1). This patented plugin allows the user to paint the influence/weight of a particular magnet directly onto the mesh. When a magnet is moved it makes the vertices move a distance relative to their assigned influence. The plugin allows you to import FaceTracker data and assign it directly, creating the final output animation automatically.
	Company: <i>Peppers Ghost Productions</i> Contact: Carl Goodman (R&D Manager) E-mail: <u>carl.goodman@peppersghost.com</u> Phone: +44 181 546 4900 Address: Clarendon House, 147 London Rd, Kingston-upon-Thames, Surrey KT 26NH. ENGLAND Website: <u>http://www.peppersghost.com</u>
"Millstone" commerical	MOTION CONTROL SOFTWARE
	The <u>Kuper motion control system</u> is used to capture and control a physical film camera. While it is widely used there isn't any software to import the resulting motion control data into 3DS MAX. I wrote a plugin that takes the motion control data and creates an animated camera in 3DS MAX. I also developed a plugin to create specialized fragmentation of objects (advanced bomb plugin).
	Company: <i>Spontaneous Combustion</i> Contact: Marc Schwarz (Company CEO)
	E-mail: <u>marc@spon.com</u> Phone: +1 212 317 0077
	Address: 575 Lexington Ave, New York, NY 10022. USA Website: <u>http://www.spon.com</u>
quCat ™ Spaceball	
	INPUT DEVICES The quCat is a six DOF (degree of freedom) input device. It is similar to a mouse but allows you other directions of movement and rotation. I designed the complete specification for their interface between the device and the animation packages Discreet 3DS MAX and Alias Wavefront Maya. This was particularly challenging since many of the packages don't allow or directly support devices other than a standard mouse.
	Company: <i>3hird Dimension</i> Contact: Petter Sylvan (Company CEO) E-mail: <u>petter.sylvan@3hird.com</u> Phone: +46 31 131901 Address: Vasagatan 52, 411 37 Gothenburg, SWEDEN Website: <u>http://www.3hird.com</u>