

Stephen H. Westin

104 Eastern Heights Drive
Ithaca, NY 14850
607-279-0030

swestin@earthlink.net
http://stephen-westin.com

Objective

I am seeking a challenging position where I can bring my strengths to bear: technical proficiency, visual thinking, and a creative, outside-the-box approach to solving problems.

I believe my particular strengths lie in

- Computer graphics ranging from physically-based ray tracing to real-time simulation
- Human-computer interaction, applying knowledge of human perception
- 3D design and visualization; my experience ranges from high-quality modeling in 3D Studio Max and Sketchup to my role in initial development of a sophisticated 3D CAD system

Education

Year	Institution	Degree
1992	Cornell University	Master of Science (Computer Graphics) Thesis: Predicting Reflectance Functions from Complex Surfaces
1980	University of Michigan	Bachelor of Science in Engineering (Computer Engineering)

Experience

Years	Organization	Responsibilities
May 2014- March 2018	GammaTech, Inc. Ithaca, NY	Developed and maintained static software analysis code to check against MISRA guidelines. C++, C, Python. Enhanced Web and local GUI using Python, Jinja, wxWidgets Active in large-scale software testing (automated, manual).
2007-2014	Doron Precision Systems, Inc. Binghamton, NY	Developed graphics software for driving simulators using OpenSceneGraph, Delta3D. Developed vehicle dynamics model for real-time simulation using PAL and Bullet. Led production of geometric models and textures (vehicles, props, characters, and virtual world) using 3DS Max, Sketchup, Photoshop, etc.
2005-2007	Animusic LLC, Lansing, NY	Implemented real-time display using OpenSceneGraph Partnered in creating custom skins for GUI using Qt toolkit Installed RenderMan render farm on 13-node cluster.
1997-2005	Cornell University Program of Computer Graphics	Maintained Light Measurement Lab in support of research. Collaborated on research in camera acquisition of appearance
1984-1997	Ford Motor Company Dearborn, MI Köln, Germany	Produced HDTV animations under tight time constraints for market research and design evaluation. Coordinated development of new CAD system, then facilitated multi-million-dollar rollout to design studios. Consulted on rendering and design issues. Researched advanced electronic tools for creative design.

Publications

Hongsong Li, Sing-Choong Foo, Kenneth E. Torrance, and Stephen H. Westin.

Automated three-axis gonioreflectometer for computer graphics applications.

Advanced Characterization Techniques for Optics, Semiconductors, and Nanotechnologies II, Proc. SPIE 5878, Aug. 2005.

Stephen R. Marschner, Stephen H. Westin, Adam Arbree, and Jonathan T. Moon.

Measuring and Modeling the Appearance of Finished Wood.

ACM Transactions on Graphics, Proceedings of SIGGRAPH 2005.

James A. Ferwerda, Stephen H. Westin, Randall C. Smith, and Richard Pawlicki.

Effects of rendering on shape perception in automobile design.

First ACM Symposium on Applied Perception in Graphics and Visualization, July 2004, 107-114.

Stephen R. Marschner, Stephen H. Westin, Eric P. F. Lafortune, and Kenneth E. Torrance.

Image-based bidirectional reflectance distribution function measurement.

Applied Optics-OT, 39(16):2592--2600, June 2000.

Stephen R. Marschner, Stephen H. Westin, Eric P. F. Lafortune, Kenneth E. Torrance, and Donald P. Greenberg.

Image-based brdf measurement including human skin.

In Eurographics Workshop on Rendering, 1999.

Stephen H. Westin, James R. Arvo, and Kenneth E. Torrance.

Predicting reflectance functions from complex surfaces.

Computer Graphics (SIGGRAPH '92 Proceedings), 26:255--264, July 1992.

François X. Sillion, James R. Arvo, Stephen H. Westin, and Donald P. Greenberg.

A global illumination solution for general reflectance distributions.

Computer Graphics (SIGGRAPH '91 Proceedings), 25:187--196, July 1991.