Martin Fuhrer

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Career Objective

To further develop 3D graphics in the field of realistic modeling and rendering for real-time and offline animation.

Education

2005
University of Calgary
Master of Science: Realistic Plant Modeling and Rendering
Calgary, Alberta (Supervisor: Dr. P. Prusinkiewicz)
Major Awards: NSERC PGS-A and iCORE Grants

2001
University of Calgary
Bachelor of Science, Computer Science with Distinction
Calgary, Alberta (GPA: 3.87)
Major Awards: Dept. of Computer Science Silver Medallion

Selected Publications

Modeling and Visualization of Leaf Venation Patterns
A. Runions, M. Fuhrer, B. Lane, P. Federl, A. Rolland-Lagan, P. Prusinkiewicz
In *Proceedings of SIGGRAPH 2005.* Los Angeles.

Modeling Hairy Plants M. Fuhrer, H. Wann Jensen, P. Prusinkiewicz
In *Proceedings of Pacific Graphics 2004.* Seoul.
Reprinted in *Graphical Models 68 (4)*, 2006, representing "best original results" of PG

Lake Scene: Rendered scene of a lake, meadows, and forest
In *2002 Highlights der Physik: Die Welt Hinter den Dingen.* Duisburg, Germany.

Development Experience

2006 - present
CGGVeritas
Research Graphics Programmer
Calgary, Alberta, Canada
- develop and maintain 3D volume visualization software for seismic processing
- integrate and update disparate seismic systems during company merger

2002 - present
Independent development
Open Source Developer
Calgary, Alberta, Canada
- lead developer and founder for XDroplets and iPhoto Diet open source projects
- port and maintain open source software such as Tux Paint on Mac OS X

2001 - 2005
University of Calgary
Graphics Research Student
Calgary, Alberta, Canada
- extended L-system software for inclusion of hairs and rendering parameters
- developed venation and translucency shaders for leaves and petals
- modelled and rendered a wide variety of plants (20+) based on L-systems
- implemented elementary ray tracing and texture synthesis algorithms

May - August 2001
MGM Software Consultancy
Java Developer
Munich, Germany
- implemented validation framework for Enterprise Java Beans architecture

Transferable Skills

Programming:
- Languages: C, C++, Fortran, Objective-C, GLSL, Java, Applescript, Bash
- Libraries: OpenGL, Cocoa, Qt, STL, Boost

Graphics Software: Maya, Photoshop, Illustrator, Renderman, Final Cut

Platform Development: Mac OS X (XCode), Linux (KDevelop), Windows (MSVS)

Communication Skills: Toastmasters, Conference speaker, C++ Instructor

Portfolio

www.rhythmiccanvas.com/personal/portfolio/index.html