School Address
Sitterson Hall, Campus Box 3175
University of North Carolina
Chapel Hill, NC 27518

Christina Villarruel

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Home Address
222 Old Fayetteville Road
Apt I-302
Carrboro, NC 27510

SKILLS

Programming Languages & APIs: C, C++, HTML, Perl, OpenGL, MySQL, MatLab, POV-Ray, Assembly, Java, JavaScript, SDL, and Lingo.

Software Experience: MS Visual Studios, Borland, CodeWarrior, Vim, ParaView, VolView, Maya, Blender, Hash Animation Master, Dreamweaver, The Gimp, Adobe Photoshop, Adobe Illustrator, Adobe ImageReady, Finale, Flash, Director

Operating Systems: Windows 95/98/NT/XP, Linux RedHat/SuSE/Mandriva

EDUCATION

Mount Holyoke College, South Hadley, MA
B. A. *magna cum laude* in Computer Science, Minor: Mathematics, GPA in Major: 3.82/4.00

University of North Carolina at Chapel Hill
Masters, Computer Science, expected May 2008

PUBLICATIONS

- Q. Han, D. Merck, J. Levy, C. Villarruel, E. Chaney, and S. M. Pizer, "Proper Training," *to appear in Information Processing in Medical Imaging*, 2007.
- Villarruel, C.R. (2006). Computer Graphics and Human Depth Perception with Gaze-Contingent Depth of Field. Mount Holyoke College, Honors Thesis. http://poe.mtholyoke.edu/setr/websrc/pdfs/www/2006/175.pdf

HONORS

- Sigma Xi, Associate Member
- Mount Holyoke Leadership Award (awarded for academic merit and leadership)
- Sarah Williston Scholar (awarded for academic merit)
- National Hispanic Scholar

RELEVANT COURSEWORK

- Images, Graphics, & Vision
- Image Processing & Analysis
- Medial Representations
- Visualizations in the Sciences
- Scientific Computation
- 3-D Animation & Modeling

RELEVANT EXPERIENCE

MIDAG - University of North Carolina, Chapel Hill, NC August, 2006 -Present
Research Assistant, Medical Image Display & Analysis Group (MIDAG)
- Image Analysis and Segmentation of Medical data (CT, MRI, etc.)
- Generate 3D Graphical Models of Human Anatomy from Medical data
- Consult directly with Radiation Oncologists
- Program heavily in C++, Perl , and MatLab

ITR - Mount Holyoke College, South Hadley, MA 2004-2006
Research Assistant, Information Technology Research (ITR)
- Conducted experiments on human Depth Perception in Virtual Environments
- Researched Human/Computer Interfaces
- Designed Attention Driven Rendering system using an Eye-Tracker
- Created Computer Network between eye-tracker's host and graphic rendering machine
- Programmed heavily in C++ and OpenGL

University of Utah, Salt Lake City, UT Summer 2005
Research Assistant, Computer Science Department
- Developed Virtual Reality system to browse historic & current locations on the Earth
- Researched Visual Augmentation of Incomplete Data & Human/Computer Interfaces
- Created 3-D graphical Models and Animations in Blender

CASA - University of Massachusetts, Amherst, MA Summer 2004
Research Assistant, Collaborative Adaptive Sensing of the Atmosphere (CASA)
- Programmed and Designed CLIMANIC (Cooperative Learning In Multimedia Asynch. Networked Individualized Courseware), educational software for collaborative users
- Programmed heavily in C++ and MySQL

OTHER EXPERIENCE

Mount Holyoke College, South Hadley, MA 2003-2006
Student Web Technology Consultant
- Taught workshops on MS Office, Dreamweaver, Web Site Planning and Design, Photoshop and Digital Editing
- Provided technical support to faculty and students