

FACULTY OF ENGINEERING OTHER CONTRIBUTIONS

Name:	Amy A. Gooch
Department:	Computer Science
Purpose of Review:	Promotion
Period of Review:	up to May 2011

1 Other Contributions Report

In Dr. Amy Gooch's service to the University of Victoria, she is committed to working on student retention as well as creating a positive image of University of Victoria in the broader community of computer graphics and computer science. Many hours from professors and staff members at the University of Victoria are currently dedicated to recruitment, but very little data is being gathered on why students switch out of the program, what classes are causing trouble, or where the problems lie. Dr. Gooch's current approach works with a few students at a time, incorporating at-risk students into research or directed-studies, and tracks at-risk students through her courses. Additionally, she has co-authored the Computer Graphics and Games Option for the CS Major, which has added interesting courses (CSC 176 and CSC 205) early in the CS option in hopes of attracting and retaining students.

Dr. Gooch has given recruiting talks at UBC and at some schools in the United States (such as the University of Denver), and actively seeks out students at conferences. She also co-chaired Graphics Interfaces 2009, the oldest continuously held Computer Graphics conference, always held in Canada. UVic's presence at Graphics Interfaces and the other conferences to be held in Victoria (Computer Graphics International 2009, Eurographics Computational Aesthetics 2009, UIST 2009) brings good press for the University of Victoria.

Administrative Positions and Committees

I have participated in the following departmental committees:

- Academic Integrity Committee 2007;
- Academic Integrity Committee 2008;
- Student Competitions Committee 2010;
- Building Emergency Response Team 2008–2010.

Additionally, Dr. Gooch has chaired oral exams across campus and mentored freshman. Dr. Gooch has created several upper division computer graphics courses that the University of Victoria has never been able to offer (Computational Aesthetics, Generating Animations: Software and Scripting), and also has co-created a new option in Computer Graphics and Games. The new computer science program also includes new courses approved by faculty for addition in the 2009-2010 calendar year and has nearly as many people enrolled in the program as the other computer science programs combined.

- CSC 205: 2D Computer Graphics and Image Processing
- CSC 471: Fundamentals of Computer Rendering

- CSC 472: Fundamentals of Computer Modeling
- CSC 473: Fundamentals of Computer Animation
- CSC 486: Special Topics in Computer Graphics

2 Professional Activities (professional groups, conference organization, editorships, etc.

- Program committee member: Graphics Interface 2007, 2008
- Program committee member: Computational Aesthetics 2007, 2008, 2009, 2010
- Program Committee of NPAR 2009, 2010 (International Symposium on Non-Photorealistic Animation and Rendering)
- Program Committee for Foundations of Digital Games conference special track on games in computer science education.
- Program Committee of the 5th International Symposium on Visual Computing (ISVC09 - <http://www.isvc.net>)
- Program Committee of the GraphiCon2010 20th International Conference on Computer Graphics and Vision
- Conference Organizer for Computational Aesthetics 2009
- Co-Chair for Graphic Interface 2009
 - creation of program committee
 - creation of web page, advertising, CFP
 - inviting guest speakers
 - appoint Student Volunteer Chair, Publicity Chair
 - administer paper reviewing and selection process in a one day session located in Victoria
 - serve as liaison between authors of accepted papers and editor for proceedings
 - organizing papers into sessions, selecting session chairs, create conference schedule
 - select best student paper awards
 - oversee technical sessions on-site and make sure paper authors are registered and show up
- Associate Editorship for Transactions on Applied Perception (2006)
- In 2003, co-created MidGraph: a New local conference for the peer support on submission of SIGGRAPH papers
- Co-organizer for MidGraph, the MidWest Computer Graphics Meeting (2003, 2004), bringing students and professors together from 6 Universities in the Mid Western United States.
- Dagstuhl Seminar on Computational Aesthetics in Graphics, Visualization and Imaging (May 28 - June 6, 2006)
- Contributor to the first ACM/Eurographics Workshop on Computational Aesthetics (May 2005)
- Finance Chair for the first Symposium on Graphics and Perception to be held in conjunction with ACM SIGGRAPH 2004
- Contributor to the first ACM Campfire on Graphics and Perception 2004
- Program committee member: Second International Conference on Game Development in Computer Science Education 2007
- Program Committee, Schloss Dagstuhl, Int. Conf. and Research Center for Computer Science, Special Meeting on Computational Aesthetics 2008

- Panelist Northwestern University 35th Annual Career Day for Girls, February 25, 2006.
- Panelist Northwestern University 34rd Annual Career Day for Girls, February 26, 2005.
- Panelist Northwestern University 33rd Annual Career Day for Girls, February 21, 2004.

Technology Transfer

- Process and Systems for Relighting Images using Reflectance Matching. Jeremy Long and Amy Ashurst Gooch. (Patent Pending)

Outreach Activity (school visits, student recruitment, science fairs, etc.)

Invited talks

- [1] Amy Gooch. A Non-Photorealistic Lighting Model For Automatic Technical Illustration, July 1998. Invited talk at ACM SIGGRAPH 1998 paper.
- [2] Amy Gooch. Non-Photorealistic Rendering. , June 1999. Invited talk at Disney Feature Animation. Disney-Graph.
- [3] Amy Gooch. Using Non-Photorealistic Rendering to Communicate Shape, August 1999. Invited talk at ACM SIGGRAPH 1999 Non-Photorealistic Rendering Full-day Course.
- [4] Amy Gooch. Perception and Computer Graphics, November 2003. Invited talk at Washington University at St. Louis, Computer Science Department Colloquium.
- [5] Amy Gooch. Perception and Computer Graphics, February 2003. Invited talk at University of Iowa, Department of Computer Science Colloquium.
- [6] Amy Gooch. Perception and Computer Graphics, January 2003. Invited talk at University of Pennsylvania, GRASP Lab, Dr. Kostas Daniilidis.
- [7] Amy Gooch. Color2Gray: Saliency-Preserving Color Removal, July 2005. Invited talk at University of Utah.
- [8] Amy Gooch. Color2Gray: Saliency-Preserving Color Removal, May 2005. Invited talk at Computational Aesthetics. May 18-20th, 2005. Girona, Spain.
- [9] Amy Gooch. Illustration: Lighting and Material Properties. , 2005. Invited talk at ACM SIGGRAPH 2005, part of the SIGGRAPH 2005 Computer Generated Medical, Technical and Scientific Illustration Half-Day Course.
- [10] Amy Gooch. Color2Gray: Saliency-Preserving Color Removal, May 2006. Invited talk at University of Tubingen.
- [11] Amy Gooch. Preserving Saliency By Maintaining Perceptual Differences for Image Creation and Manipulation, April 2006. Invited talk at Purdue University.
- [12] Amy Gooch. Preserving Saliency By Maintaining Perceptual Differences for Image Creation and Manipulation, March 2006. Invited talk at College of William and Mary.

- [13] Amy Gooch. Preserving Saliency By Maintaining Perceptual Differences for Image Creation and Manipulation, February 2006. Invited talk at University of Victoria.
- [14] Amy Gooch. Visualizing Pentimenti: Revealing Hidden History in Paintings, May 2006. Invited talk at Dagstuhl Seminar on Computational Aesthetics in Graphics, Visualization and Imaging.
- [15] Amy Gooch. CS1: Where 's It Going, and What Should We Be Thinking About?, July 2007. Invited talk at Microsoft Faculty Summit.
- [16] Amy Gooch. Graphics at Uvic, 2007. Invited talk at University of Utah.
- [17] Amy Gooch. Preserving Saliency By Maintaining Perceptual Differences for Image Creation and Manipulation, July 2007. Invited talk at Workshop on CG: Current Trends in Research and Industry, Lahore University, Pakistan.
- [18] Amy Gooch. Revealing Pentimenti: the hidden history of paintings, February 2007. Invited talk at SPIE Human Vision and Electronic Imaging Conference. Invited talk and invited paper, San Jose CA.
- [19] Amy Gooch. Graphics at Uvic, February 2008. Invited talk at University of British Columbia.
- [20] Amy Gooch. Job Search Process, March 2008. Invited talk at ACM CRA-W Grad Co-hort, Seattle, WA.
- [21] Amy Gooch. Expanding Our Vision: Images and Gaming, February 2010. Invited talk at University of Denver.

Other Outreach

- Demos for Autistic children May 2011
- Panelist 2010 for Uvic Learning and Teaching Center Professional Development Program in University Teaching
- Uvic Engineering Freshman Orientation Demos 2010
- Faculty of Engineering Open House, two demos from the Graphics Group, Oct 2008
- Uvic Engineering Freshman Orientation Demos 2008
- Assisted with creation and organization of Uvic Campus Wide Video Game Design Challenge (Dr. Gooch was interviewed by Shaw Daily Show aired on March 10th, 2008)
- Uvic Engineering Freshman Orientation Demos 2007

Community Activity (contributions related to your discipline expertise)

In 2008-2009, Dr. Gooch worked with three Uvic undergraduate students funded by ACM CRA-W to create an installation of a serious/educational game on frog habitats for the San Diego Zoo (currently seeking connections with zoos and science museums in Canada). We have a prototype of the game and are currently looking to install it in ECS at Uvic.

Signature: _____

Date: _____