

Samantha Jane Horvath

Biographical:

Home Address:
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DOB: 06/17/1988
Citizenship: USA

Education:	Carnegie Mellon University PhD Candidate, Robotics Institute	Current
	University of Pittsburgh Bachelor of Science Major: Bioengineering, Minor : Computer Science GPA: 3.824	Degree Received April 2010
Experience:	Visualization and Image Analysis Laboratory Graduate Student Researcher	2010 - Current
	<ul style="list-style-type: none">• Computer Vision• Laser optics	
	Visualization and Image Analysis Laboratory Undergraduate Research Assistant	2007 - 2010
	<ul style="list-style-type: none">• Preparation of course materials (BLIP)• Prototyping of haptic devices• Computer vision programming	
	Magee Womens Research Institute Summer Student	Summer 2007
	<ul style="list-style-type: none">• Use and care of Laser confocal microscope• Preparation of stem cell culture	
	Magee Womens Research Institute Summer Student	Summer 2006
	<ul style="list-style-type: none">• Performing rodent surgery• Isolation of testicular stem cells	

Honors And Awards:	Beckman Scholar (\$18,000 undergraduate research fellowship)	2009 - 2010
	University of Pittsburgh Chancellor's Scholar (4 year, full tuition, room and board scholarship)	2006 - 2010
	Engineering Honors Scholar	2006
	School of Engineering Honors Student	2006 – 2010

Publications

G. Stetten, S. Horvath, J. Galeotti, G. Shukla, B. Chapman, **Image segmentation using the student's t-test on adjacent spherical populations of pixels**, *SPIE Medical Imaging 2010*, paper #7623-125, poster presentation 2/14-15/2010.

Conferences/Presentations

J. Galeotti, J. Wang, S. Horvath, M. Siegel, G. Stetten, **ProbeSight: Video Cameras on an Ultrasound Probe for Computer Vision of the Patient's Exterior**, *Image Guided Therapy Workshop*, Oct 12-13, 2011, Arlington, VA.

S. Horvath, J. Galeotti, B. Wang, M. Perich, J. Wang, M. Siegel, P. Vescovi, G. Stetten, **Towards an Ultrasound Probe with Vision: Structured Light to Determine Surface Orientation**, *Augmented Environments for Computer Assisted Interventions*, MICCAI, Sept. 22, 2011, Toronto, Canada (accepted or podium presentation).

S. Horvath, J. Galeotti G. Stetten. **FingerSight: Fingertip Haptic Sensing of the Visual Envirnoment**. *Beckman Scholars Symposium 2010*. Irvine, CA July 23 – 25, 2010.

J. Galeotti, S. Horvath, R. Klatzky, B. Nichol, M. Siegel, G. Stetten. **FingerSight: Fingertip Control and Haptic Sensing of the Visual Environment**, *SIGGRAPH 2008 - New Tech Demos*, Los Angeles, California, August 11-15, 2008.

G. Stetten, D. Weiser, T. Cooper, S. Horvath. **PittKit and the Breadboard Laboratory Interface Processor (BLIP): An educational apparatus centered on the individual student**, *Biomedical Engineering Division of the 2008 ASEE Conference*, Pittsburgh, June 22-25, 2008

G. Stetten, R. Klatzky, B. Nichol, J. Galeotti, K. Rockot, K. Zawrotny, D. Weiser, N. Sendgikoski, S. Horvath. **Fingersight: Fingertip Visual Haptic Sensing and Control**, *HAVE 2007 – IEEE International Workshop on Haptic Audio Visual Environments and their Applications*, Ottawa, Canada, 12-14 October 2007.

**Additional
Activities:**

Pittsburgh Fencing Association – Member (2006-2010)
PFA - Secretary/Treasurer (2007 – 2008)
PFA – Vice President (2008-2010)

**Computer
Skills:**

Extensive experience with Java, C++, and MATLAB