

MIKE ROBERTS

CONTACT INFORMATION	School of Engineering and Applied Sciences Harvard University Room 231, 52 Oxford Street Cambridge, MA, 02138	+1 (617) 852 4179 mroberts@seas.harvard.edu people.seas.harvard.edu/~mroberts
CURRENT EMPLOYMENT	Harvard University <i>Research Fellow, School of Engineering and Applied Sciences</i> Advisor: Hanspeter Pfister	2010 –
EDUCATION	University of Calgary <i>M. Sc. Computer Science</i> Advisors: Mario Costa Sousa and Joseph Ross Mitchell Thesis Topic: Fast Volume Segmentation with Sparse Level Sets GPA: 3.85 / 4.00	2008 – 2010
	University of Calgary <i>B. Sc. (Honors, Internship) Computer Science</i> Thesis Topic: Designing a Subtitle System for <i>Scarface: The World Is Yours</i> GPA: 3.37 / 4.00	2001 – 2007
HONORS AND AWARDS	NSERC Alexander Graham Bell Canada Graduate Scholarship, \$105,000 17% success rate (285 / 1684)	2011
	Invited oral presentation at the IEEE Symposium on Biological Data Visualization 12% success rate (4 / 33)	2011
	Janelia Farm Research Campus Travel Scholarship, \$450	2011
	SIGGRAPH 2010 Student Research Competition Semi-Finalist, \$500 13% success rate (25 / 189)	2010
	University of Calgary Graduate Conference 2010 NSERC Best Poster Award, \$300 3% success rate (1 / 39)	2010
	Intellectual property transfer to Calgary Scientific, \$ undisclosed	2009
	Queen Elizabeth II Graduate Scholarship, \$10,800	2009
	Queen Elizabeth II Graduate Scholarship, \$10,800	2008
	Jason Lang Scholarship, \$1,000	2006
PUBLICATIONS	Neural Process Reconstruction from Sparse User Scribbles Mike Roberts, Won-Ki Jeong, Amelio Vazquez-Reina, Markus Unger, Horst Bischof, Jeff Lichtman, Hanspeter Pfister <i>Medical Image Computing and Computer Assisted Intervention (MICCAI) 2011</i> 31% acceptance rate (251 / 819) <ul style="list-style-type: none">Invited for oral presentation at the IEEE Symposium on Biological Data Visualization 2011	2011
	A Work-Efficient GPU Algorithm for Level Set Segmentation Mike Roberts, Jeff Packer, Mario Costa Sousa, Joseph Ross Mitchell <i>High Performance Graphics 2010</i> 33% acceptance rate (21 / 64) <ul style="list-style-type: none">SIGGRAPH 2010 Student Research Competition Semi-FinalistUniversity of Calgary Graduate Conference 2010 NSERC Best Poster AwardIntellectual property transferred to Calgary Scientific	2010
	Hybrid Visibility Masking and Compositing for Illustrative Rendering Stephan Bruckner, Peter Rautek, Ivan Viola, Mike Roberts, Mario Costa Sousa, M. Eduard Groller <i>Computers & Graphics 34(4)</i> 26% acceptance rate	2010

INVITED TALKS	Fast Volume Segmentation with Sparse Level Sets	
	<i>Massachusetts Institute of Technology</i>	2011
	<i>Max Planck Institut fur Informatik</i>	2011
	<i>NVIDIA GPU Technology Conference 2010</i>	2010
	<i>Vienna University of Technology</i>	2010
	Neural Process Reconstruction from Sparse User Scribbles	
<i>IEEE Symposium on Biological Data Visualization 2011</i>	2011	
INDUSTRIAL EXPERIENCE	Advanced Medical Volume Rendering and Segmentation on the GPU	
	with Eric Penner	
	<i>NVIDIA GPU Technology Conference 2010</i>	2010
	Calgary Scientific	Fall 2009
	<i>Consultant</i>	
	Transferred the intellectual property from my M. Sc. thesis to Calgary Scientific. Integrated my M. Sc. research software into Calgary Scientific's commercial software portfolio.	
NVIDIA	Summer 2009	
<i>Developer Tools Programmer Intern</i>		
Designed and implemented an extensible data visualization system for <i>NVIDIA Parallel Nsight</i> , a GPU debugger integrated into <i>Microsoft Visual Studio</i> .		
JSJ Connections	2006 – 2007	
<i>Search Engine Programmer</i>		
Designed and implemented a user-to-user matching engine for <i>JackSawJane</i> , a unique dating and social networking website.		
Radical Entertainment	2005 – 2006	
<i>Graphics Programmer Intern</i>		
Designed and implemented user-interface systems for the game <i>Scarface: The World Is Yours</i> . Developed a world viewer tool for the PC, Xbox 360, and Playstation 3.		
TEACHING EXPERIENCE	Harvard University, Teaching Fellow, <i>Visualization</i>	Winter 2012
	Harvard University, Teaching Fellow, <i>Computing Foundations for Computational Science</i>	Fall 2011
	Harvard University, Teaching Fellow, <i>Massively Parallel Computing</i>	Winter 2011
	University of Calgary, Teaching Assistant, <i>Computer Rendering</i>	Winter 2009
	University of Calgary, Teaching Assistant, <i>Introduction to Computer Science</i>	Fall 2008
	University of Calgary, Teaching Assistant, <i>Introduction to Computer Science</i>	Winter 2008
	University of Calgary, Guest Lecturer, <i>Video Game Programming</i>	Winter 2008
	University of Calgary, Guest Lecturer, <i>Video Game Programming</i>	Winter 2007
	University of Calgary, Guest Lecturer, <i>Video Game Programming</i>	Winter 2006
	University of Calgary, Tutor, <i>Introduction to Computer Science</i>	2002 – 2003
	Access Tutoring, Tutor, <i>Calculus I</i>	2002 – 2005
PAPER REVIEWING EXPERIENCE	<i>Innovative Parallel Computing 2012</i>	2012
	<i>5th Workshop on General Purpose Computing on Graphics Processing Units</i>	2012
	<i>4th Workshop on General Purpose Computing on Graphics Processing Units</i>	2011

REFERENCES

Hanspeter Pifster

Gordon McKay Professor of the Practice of Computer Science, Harvard University
pifster@seas.harvard.edu

Joseph Ross Mitchell

Division Chair of Health Sciences Research, Mayo Clinic
mitchell.ross@mayo.edu

Mario Costa Sousa

Associate Professor, University of Calgary
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