



FORM 100
Personal Data Form
PART I

Date
2009/10/22

Family name Heidrich	Given name Wolfgang	Initial(s) of all given names W.	Personal identification no. (PIN) 242351
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I hold a faculty position at an eligible Canadian college (complete Appendices B1 and C)

I do not or will not hold an academic appointment at a Canadian postsecondary institution

Place of employment other than a Canadian postsecondary Institution (give address in Appendix A)

APPOINTMENT AT A POSTSECONDARY INSTITUTION

Title of position Associate Professor	Tenured or tenure-track academic appointment Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Department Computer Science	Part-time appointment <input type="checkbox"/> Full-time appointment <input checked="" type="checkbox"/>
Campus	<ul style="list-style-type: none"> For all non-tenured or non tenure-track academic appointment and Emeritus Professors, complete Appendices B & C For life-time Emeritus Professor and part-time positions, complete Appendix C
Canadian postsecondary institution British Columbia	

ACADEMIC BACKGROUND

Degree	Name of discipline	Institution	Country	Date yyyy/mm
Bachelor's	Computer Science	Friedrich-Alexander Univ Erlangen-Nürnberg	GERMANY	1995 / 10
Master's	Computer Science	Waterloo	CANADA	1996 / 01
Doctorate	Computer Science	Friedrich-Alexander Univ Erlangen-Nürnberg	GERMANY	1999 / 04

TRAINING OF HIGHLY QUALIFIED PERSONNEL

Indicate the number of students, fellows and other research personnel that you:

	Currently		Over the past six years (excluding the current year)		Total
	Supervised	Co-supervised	Supervised	Co-supervised	
Undergraduate			5		5
Master's	2		7	1	10
Doctoral	7	1	3	1	12
Postdoctoral	1		3	2	6
Others					
Total	10	1	18	4	33

Personal identification no. (PIN)

242351

Family name

Heidrich

ACADEMIC, RESEARCH AND INDUSTRIAL EXPERIENCE (use one additional page if necessary)

Position held (begin with current)	Organization	Department	Period (yyyy/mm to yyyy/mm)
Associate Professor	British Columbia	Computer Science	2004/07
Assistant Professor	University of British Columbia	Computer Science	2000/09 to 2004/06
Research Associate	Max-Planck-Institute for Computer Science	Computer Graphics Group	1999/04 to 2000/08
Researcher	Friedrich-Alexander Univ Erlangen-Nürnberg	Computer Graphics Group	1996/04 to 1999/03

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Heidrich

RESEARCH SUPPORT

Family name and initial(s) of applicant	Title of proposal, funding source and program, and time commitment (hours/month)	Amount per year	Years of tenure (yyyy)
List all sources of support (including NSERC grants and university start-up funds) held as an applicant or a co-applicant: a) support held in the past four (4) years but now completed; b) support currently held, and c) support applied for. For group grants, indicate the percentage of the funding directly applicable to your research. Use additional pages as required.			
a) Support held in the past 4 years			
X. Granier	Laboratory for Interactive Graphics on Handheld and Tabletop Displays INRIA, France INRIA Equipe Associee	31,500 (50%) 31,500 (50%) 31,500 (50%)	2004 2005 2006
W. Heidrich	3D Geometry Acquisition and Rapid Prototyping Environment CFI Infrastructure Operating Grant	1,875(100%) 8,200(100%) 8,500(100%) 8,500(100%) 6,625(100%)	2004 2005 2006 2007 2008
W. Heidrich	Video Generation and Processing for High Dynamic Range Display Devices NSERC/Brightside Technologies Special Research Opportunity	149,175 (50%)	2006 2007
W. Heidrich	Computational Optics for High Dynamic Range Imaging MITACS / Dolby Canada Seed Project	60,000 (50%)	2007

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RESEARCH SUPPORT

Family name and initial(s) of applicant	Title of proposal, funding source and program, and time commitment (hours/month)	Amount per year	Years of tenure (yyyy)
List all sources of support (including NSERC grants and university start-up funds) held as an applicant or a co-applicant: a) support held in the past four (4) years but now completed; b) support currently held, and c) support applied for. For group grants, indicate the percentage of the funding directly applicable to your research. Use additional pages as required.			
a) Support held in the past 4 years			
W. Heidrich	Active Optical Filters for Direct Image Processing of Visual Input NVIDIA Corp Collaborative Research Agreement	44,088(100%)	2007
b) Support currently held			
W. Heidrich	Realistic Graphics - From Sensing to Display NSERC Discovery grant 80 hours/month	36,000(100%) 36,000(100%) 36,000(100%) 36,000(100%) 36,000(100%)	2005 2006 2007 2008 2009
W. Heidrich	High Dynamic Range Imaging Dolby Canada Research Chair	150,000(100%) 150,000(100%) 150,000(100%) 150,000(100%) 150,000(100%)	2008 2009 2010 2011 2012
P. Nasiopoulos	High Dynamic Range Video, Video Processing, Video Processing, Tone Mapping NSERC Strategic Grant 10 hours/month	210,500 (20%) 210,500 (20%) 210,500 (20%)	2009 2010 2011

Highly Qualified Personnel (HQP)

Provide personal data about the HQP that you currently, or over the past six years, have supervised or co-supervised.

			Personal identification no. (PIN)	Family name
			242351	Heidrich
Name	Type of HQP Training and Status	Years Supervised or Co-supervised	Title of Project or Thesis	Present Position
Alexander Gukov	Master's (In Progress)	Supervised 2009 -	Multispectral imaging device and database	Graduate student
Benjamin Cecchetto	Master's (In Progress)	Supervised 2009 -	Fluid capture (working title)	Graduate student
Dr. Lukas Ahrenberg	Postdoctoral (In Progress)	Supervised 2009 -	Fourier Optics methods in computational photography	UBC postdoc
Mushfiqur Rouf	Doctoral (In Progress)	Supervised 2009 -	Computational Photography (working title)	Graduate student
Bradley Atcheson	Doctoral (In Progress)	Supervised 2007 -	Fluid Imaging (working title)	UBC graduate student
Gordon Wetzstein	Doctoral (In Progress)	Supervised 2007 -	Computational Photography	PhD. student
Steve DiPaola	Doctoral (In Progress)	Co-supervised 2007 -	Computer-generated portraits	Associate Prof., Simon Fraser U.
Allan Rempel	Doctoral (In Progress)	Supervised 2006 -	Dynamic Range Expansion of Images and Video	Ph.D student
Cheryl Lau	Doctoral (In Progress)	Supervised 2006 -	Color Space Manipulations	Ph.D student
Matthew Trentacoste	Doctoral (In Progress)	Supervised 2006 -	High Dynamic Range Imaging	PhD student
Derek Bradley	Doctoral (In Progress)	Supervised 2005 -	Capture of dynamically deforming geometry	Graduate student, UBC
Curt da Silva	Undergraduate (Completed)	Supervised 2009 - 2009	Poisson solvers and graph cuts for image manipulations	Undergraduate student, UBC
Steven Stuber	Undergraduate (Completed)	Supervised 2009 - 2009	Embedded controllers for cameras and light sources	Undergraduate student, UBC
Dr. Ivo Ihrke	Postdoctoral (Completed)	Supervised 2008 - 2009	Fluid Imaging	Faculty at Max-Planck Institute for Computer Science
Dr. Rafal Mantiuk	Postdoctoral (Completed)	Supervised 2008 - 2009	High Dynamic Range Imaging	Faculty and Bangor University (Wales)
Mushfiqur Rouf	Master's (Completed)	Supervised 2008 - 2009	Single Exposure HDR Imaging with a Conventional Camera Using	UBC PhD student
Helge Seetzen	Doctoral (Completed)	Co-supervised 2004 - 2009	High Dynamic Range Display and Projection Systems	Director of HDR Technologies, Dolby Canada
Bradley Atcheson	Master's (Completed)	Supervised 2006 - 2007	2D and 3D Schlieren imaging of flows	UBC graduate student
Matthew O'Toole	Undergraduate (Completed)	Supervised 2006 - 2007	Real-time Rendering of Acquired BRDF Data Sets	Graduate Student, U Toronto
Abhijeet Ghosh	Doctoral (Completed)	Supervised 2003 - 2007	High Dynamic Range Sensing and Graphics	Senior Researcher, USC Institute for Creative Technologies

Highly Qualified Personnel (HQP)

Provide personal data about the HQP that you currently, or over the past six years, have supervised or co-supervised.

			Personal identification no. (PIN)	Family name
			242351	Heidrich
Name	Type of HQP Training and Status	Years Supervised or Co-supervised	Title of Project or Thesis	Present Position
Borislav Trifonov	Master's (Completed)	Supervised 2005 - 2006	Tomographic geometry acquisition of transparent objects	Unknown
Johnson Chuang	Undergraduate (Completed)	Supervised 2005 - 2006	Contour Processing for Rapid Prototyping Machines	Unknown
Shruthi Achutha	Master's (Completed)	Supervised 2004 - 2006	BRDF Acquisition with Basis Illumination	Developer, Microsoft Digital Media Group
Ken MacKay	Undergraduate (Completed)	Supervised 2004 - 2005	Feature matching on 3D geometry	Unknown
Fred Kimberley	Master's (Completed)	Supervised 2003 - 2005	Real-time Texture Synthesis	Game Developer
Jennifer Fung	Master's (Completed)	Supervised 2003 - 2005	GPU-friendly tessellation of curved surfaces	Developer, Dreamworks Animation
Matthew Trentacoste	Master's (Completed)	Supervised 2003 - 2005	Perceptual Rendering Algorithm for HDR Displays	Ph.D student, UBC
David Burke	Master's (Completed)	Supervised 2004 - 2004	Bidirectional sampling for global illumination	Game developer
Dr. Kees van den Doel	Postdoctoral (Completed)	Co-supervised 2003 - 2004	Sound measurement and synthesis	Research Associate, UBC
Dr. John Lloyd	Postdoctoral (Completed)	Co-supervised 2002 - 2004	Reality-based modeling	Research Associate, UBC
Shuzhen Wang	Master's (Completed)	Supervised 2002 - 2004	An Inexpensive 122 Million Pixel Scan Camera	developer, online gaming company in Vancouver
Lisa Streit	Doctoral (Completed)	Supervised 2000 - 2004	Modeling of feather coat morphogenesis	Research Staff, Electronic Arts
Roger Tam	Doctoral (Completed)	Supervised 2000 - 2004	A stable and flexible computational shape model	Assistant Professor, UBC Radiology Department

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Personal information collected on this form and appendices will be stored in the Personal Information Bank for the appropriate program.

Version française disponible



PROTECTED WHEN COMPLETED

1 Most Significant Contributions

A significant portion of my recent research activities were in the area of high dynamic range (HDR) imaging and display, which aims to replace the conventional imaging pipeline with one that has drastically improved contrast and brightness. This is an interdisciplinary effort, involving UBC Physics&Astronomy (Dr. Whitehead), UBC spinoff company Brightside Technologies, (Seetzen and Ward - Seetzen is now also a Ph.D student that I co-supervise with Dr. Whitehead). Brightside was recently acquired by Dolby Labs, and is now Dolby Canada. In this interdisciplinary setting, my students and I have contributed to the development of the first and so far only true HDR display technology (A11,C13), algorithms to process images for presentation on such displays (A11,A7), the first processing algorithm for estimating HDR video sequences from conventional low contrast video (A8), as well as a perceptual study that analyzes user preferences for brightness and contrast settings (C1,C13). In 2008 Dolby funded an industrial research chair that I currently hold at UBC, and which continues to support my work in high dynamic range imaging.

A recent project with post-doctoral researcher Dr. Ihrke and Ph.D student Atcheson has been the capture of fluid flows using a novel background-oriented Schlieren setup. In (A5,A4), we presented work on visible light tomography for gas flows. Our work enables us to measure time-varying flows on a dense volumetric grid, a first not only in computer graphics but also in the field of fluid imaging.

Together with Ph.D student Ghosh, I have worked on advanced stochastic sampling strategies for illumination (C9,C11,C15). These methods dramatically improve the performance of direct illumination computations from complicated light sources such as environment maps. This task dominates the compute times of many rendering algorithms, including global illumination algorithms. The effort on these papers is split evenly with Ghosh.

Article (A14) represents a new method for measuring the emission characteristics of light sources such as car head lights or architectural lighting components for use in computer graphics. The method has been met with a large interest by the automotive industry, and there is a push toward standardizing the method and file formats involved. A large part of the theory was developed by myself, while my co-authors mostly focused on the actual acquisition (Goesele) and the rendering algorithm (Granier). I wrote the majority of the article.

Article (A16) describes an approach for measuring the reflectance properties of real-world surfaces. This is the first work that can acquire different reflection properties for every point on the surface with a very small number of images. The published conference version of this paper is widely referenced and is a landmark paper in this area. I came up with the initial idea, coordinated the research efforts, and wrote large parts of the papers. My students contributed to the ideas and worked on individual parts of the implementation. More recent work on a similar topic (A2,C7) introduces the notion of optically projecting reflectance properties into basis functions for measurement, resulting in dramatically reduced acquisition times. This work won a Marr Prize Honorable Mention at ICCV 2007.

2 Research Contributions

Names in bold are students or PostDocs I supervised at the time. On most articles, students are listed first, faculty last. Within each group, the names are ordered by significance of the contribution.

Articles

- A1 **G. Wetzstein**, W. Heidrich, D. Luebke: *Optical Image Processing Using Light Modulation Displays*. Computer Graphics Forum, 2009. (10 pages, in print).
- A2 **A. Ghosh**, W. Heidrich, **S. Achutha**, **M. O’Toole**: *A Basis Illumination Approach to BRDF Measurement*. International Journal on Computer Vision, 2009. (15 pages, in print).
- A3 **R. Mantiuk** and W. Heidrich: *Visualizing High Dynamic Range Images in a Web Browser*. Journal of Graphics, GPU, & Game Tools, 14(1):43–53, June 2009.
- A4 **B. Atcheson**, W. Heidrich, **I. Ihrke**: *An Evaluation of Optical Flow Algorithms for Background Oriented Schlieren Imaging*. Experiments in Fluids, 46(3):467–476, March 2009.
- A5 **B. Atcheson**, **I. Ihrke**, W. Heidrich, A. Tevs, **D. Bradley**, M. Magnor, H.-P. Seidel: *Time-resolved 3D Capture of Non-Stationary Gas Flows*. ACM Transactions on Graphics (Proc. SIGGRAPH ASIA), 27(4), December 2008. Article 132, 9 pages.
- A6 **D. Bradley**, **T. Popa**, A. Sheffer, W. Heidrich, T. Boubekeur: *Markerless Garment Capture*. ACM Transactions on Graphics (Proc. SIGGRAPH), 27(3), July 2008. Article 99, 9 pages.
- A7 **M. Trentacoste**, **H. Seetzen**, W. Heidrich, L. Whitehead, G. Ward: *Photometric Image Processing for High Dynamic Range Displays*. Journal of Visual Communication and Image Representation, 18(5):439–451, October 2007.
- A8 **A. Rempel**, **M. Trentacoste**, **H. Seetzen**, **D. Young**, W. Heidrich, L. Whitehead, G. Ward: *Ldr2Hdr: On-the-fly Reverse Tone Mapping of Legacy Video and Photographs*. ACM Transactions on Graphics (Proc. SIGGRAPH), 26(3), July 2007. Article 39, 6 pages.
- A9 R. Corbett, **K. van den Doel**, **J. Lloyd**, W. Heidrich: *TimbreFields — 3D Interactive Sound Models for Real-Time Audio*. Presence – Teleoperators and Virtual Environments, 16(6):643–654, December 2007.
- A10 W. Heidrich: *Computing the Barycentric Coordinates of a Projected Point*. Journal of Graphics Tools, 10(3):9–12, 2005.
- A11 **H. Seetzen**, W. Heidrich, W. Stuerzlinger, G. Ward, L. Whitehead, **M. Trentacoste**, **A. Ghosh**, A. Vorozcovs: *High Dynamic Range Display Systems*. In *ACM Transactions on Graphics (Proc. SIGGRAPH)*, pages 760–768. ACM, August 2004.
- A12 P.-P. Vázquez, M. Feixas, M. Sbert, W. Heidrich: *Automatic View Selection Using Viewpoint Entropy and its Application to Image-Based Modelling*. Computer Graphics Forum, 22(4):689–700, November 2003.
- A13 **X. Granier** and W. Heidrich: *A Simple Layered RGB BRDF Model*. Graphical Models, 65(4):171–184, July 2003.
- A14 **M. Goesele**, **X. Granier**, W. Heidrich, H.-P. Seidel: *Accurate Light Source Acquisition and Rendering*. In *ACM Transactions on Graphics (Proc. SIGGRAPH)*, pages 621–630. ACM, July 2003.
- A15 **K. Daubert**, W. Heidrich, **J. Kautz**, J.-M. Dischler, H.-P. Seidel: *Efficient Light Transport Using Precomputed Visibility*. IEEE Computer Graphics and Applications, 23(3):28–37, May/June 2003.

- A16 **H. Lensch, J. Kautz, M. Goesele, W. Heidrich, H.-P. Seidel**: *Image-Based Reconstruction of Spatial Appearance and Geometric Detail*. ACM Transactions on Graphics, 22(2):234–257, April 2003.

Refereed Conference Articles

Due to space constraints I had to omit many publications in this category.

- C1 **A. Rempel, R. Mantiuk, W. Heidrich, Hiroe Li**: *Video Viewing Preferences for HDR Displays Under Varying Ambient Illumination*. In *Proc. Applied Perception in Graphics and Visualization*, 2009. (8 pages, in print).
- C2 **R. Mantiuk, A. Rempel, W. Heidrich**: *Display Considerations for Night and Low-Illumination Viewing*. In *Proc. Applied Perception in Graphics and Visualization*, 2009. (8 pages, in print).
- C3 **D. Bradley, B. Atcheson, I. Ihrke, W. Heidrich**: *Synchronization and Rolling Shutter Compensation for Consumer Video Camera Arrays*. In *Proc. ProCams*, pages 1–8, 2009. (**Best paper award, second prize**).
- C4 **R. Mantiuk, R. Mantiuk, A. Tomaszewska, W. Heidrich**: *Color Correction for Tone Mapping*. In *Computer Graphics Forum (Proc. Eurographics)*, pages 193–202, 2009.
- C5 **T. Popa, Q. Zhou, D. Bradley, V. Kraevoy, H. Fu, A. Sheffer, W. Heidrich**: *Wrinkling Captured Garments Using Space-Time Data-Driven Deformation*. In *Computer Graphics Forum (Proc. Eurographics)*, pages 427–435, 2009.
- C6 **D. Bradley, T. Boubekeur, W. Heidrich**: *Accurate Multi-View Reconstruction Using Robust Binocular Stereo and Surface Meshing*. In *Proc. Conference on Computer Vision and Pattern Recognition (CVPR)*, 2008. 8 pages.
- C7 **A. Ghosh, S. Achutha, W. Heidrich, M. O’Toole**: *BRDF Acquisition with Basis Illumination*. In *Proc. International Conference on Computer Vision (ICCV)*, 2007. 8 pages.
- C8 **H. Seetzen, S. Makki, H. Ip, T. Wan, V. Kwong, G. Ward, W. Heidrich, L. Whitehead**: *Self-Calibrating Wide Color Gamut High Dynamic Range Display*. In *Electronic Imaging*, 2007. Paper 36, 9 pages.
- C9 **A. Ghosh** and **W. Heidrich**: *Correlated Visibility Sampling for Direct Illumination*. In *The Visual Computer (Proc. Pacific Graphics)*, pages 693–701, 2006.
- C10 **T. Boubekeur, W. Heidrich, X. Granier, C. Schlick**: *Volume-Surface Trees*. In *Computer Graphics Forum (Proc. Eurographics)*, pages 399–406, 2006. (**Winner of the Günter Enderle Award and the Best Student Paper Award**).
- C11 **A. Ghosh, A. Doucet, W. Heidrich**: *Sequential Sampling of Environment Maps*. In *Proc. Eurographics Symposium on Rendering*, pages 115–126, 2006.
- C12 **B. Trifonov, D. Bradley, W. Heidrich**: *Tomographic Reconstruction of Transparent Objects*. In *Proc. Eurographics Symposium on Rendering*, pages 51–60, 2006.
- C13 **H. Seetzen, H. Li, L. Ye, W. Heidrich, L. Whitehead, G. Ward**: *Observations of Luminance, Contrast, and Amplitude Resolution of Displays*. In *Society for Information Display (SID) Digest*, pages 1229–1233, 2006.

- C14 **A. Ghosh, M. Trentacoste, H. Seetzen, W. Heidrich**: *Real Illumination from Virtual Environments*. In *Proc. Eurographics Symposium on Rendering*, pages 243–252, June 2005.
- C15 **D. Burke, A. Ghosh, W. Heidrich**: *Bidirectional Importance Sampling for Direct Illumination*. In *Proc. Eurographics Symposium on Rendering*, pages 147–156, June 2005.
- C16 **A. Ghosh, M. Trentacoste, W. Heidrich**: *Volume Rendering for High Dynamic Range Displays*. In *Proc. Volume Graphics 2005*, pages 91–98, June 2005.
- C17 **S. Wang** and W. Heidrich: *The Design of an Inexpensive Very High Resolution Scan Camera System*. In *Computer Graphics Forum (Proc. of Eurographics)*, pages 441–450, September 2004.
- C18 **R. Tam** and W. Heidrich: *Computing Polygonal Surfaces From Unions of Balls*. In *Computer Graphics International*, pages 86–92, June 2004.
- C19 **H. Küick** and W. Heidrich: *Shape from Contours and Multiple Stereo*. In *Canadian Conference on Computer and Robot Vision*, pages 76–83, May 2004.
- C20 **S. Wang** and W. Heidrich: *UBC ScanCam: An Inexpensive 122 Million Pixel Scan Camera*. In *IS&T/SPIE Symposium on Electronic Imaging*, pages 421–430, January 2004.

Non-Refereed Contributions - Books and Book Chapters

- B1 T. Akenine-Möller and W. Heidrich (eds.): *Rendering Techniques 2006* (Proc. Eurographics Symposium on Rendering). Eurographics Association, June 2006. 443 pages.
- B2 W. Heidrich and R. Balakrishnan (eds.): *Proc. of Graphics Interface, 2004*. A K Peters, June 2004. 279 pages.
- B3 M. Olano, J. Hart, W. Heidrich, M. McCool: *Real-Time Shading*. A K Peters, July 2002. 346 pages.
- B4 T. Ertl, W. Heidrich, M. Doggett (eds.): *Proc. of Graphics Hardware, 2002*. ACM Press, September 2002. 163 pages.

Non-Refereed Contributions - Tutorials

I presented several full-day or half-day courses and tutorials at internationally renowned conferences in the past six years, including ACM Siggraph (8 total), Eurographics (3 total), World Wide Web conference, etc.

3 Other Evidence of Impact and Contributions

Papers Chair and Membership on Program Committees

I have served as a papers or program co-chair for the following international conferences: Eurographics Symposium on Rendering 2006, Graphics Interface 2004, Graphics Hardware 2003, Graphics Hardware 2002. In addition to reviewing numerous articles for journals and conferences, I have served on over 40 program committees, including multiple years of service for ACM Siggraph, Eurographics, Graphics Hardware, Graphics Interface, Pacific Graphics, Eurographics Workshop on Rendering, CGI, SIBGRAPI, and WSCG.

Leadership

I am an active participant in the research community. In addition to my service ad program chair and on program committees, I am an elected member of the Eurographics Executive Committee. I also serve on both the Siggraph Small Conference Committee and the Eurographics Workshop Committee, where I help deciding on the sponsorship of conferences and workshops by the respective association. I am a co-applicant and designated theme leader in the GRAND NCE application.

Keynotes

A selection of keynotes and invited talks:

- Image Processing for HDR Displays*, Invited Talk, High Dynamic Range Imaging Symposium and Workshop, September 2009.
- Bringing High Dynamic Range to your Living Room*, Keynote, Spring Conference in Computer Graphics, April 2008.
- Towards a High Dynamic Range Imaging Pipeline*, Keynote (one of 6 for a full-week conference), Dagstuhl Seminar “Visual Computing: Convergence of Computer Graphics and Computer Vision”, Dagstuhl (Germany), April 2007.
- High Dynamic Range Imaging and Display*, Keynote, GRAPP/VISAPP, Barcelona (Spain), February 2007.
- Toward a Rendering Pipeline for Haptic Displays*, Keynote, NVIDIA-U, San Diego, July 2003.
- Hardware Shading: New Developments in the Graphics Pipeline*. Invited Lecture, First International Game Technology Conference, Hong Kong, China, January 2001.
- Hardware Shading: State-of-the-Art and Future Challenges* (with H.-P. Seidel). Keynote Address, Eurographics/SIGGRAPH Workshop on Graphics Hardware, Interlaken, Switzerland, September 2000.

4 Training of Highly Qualified Personnel

I invest a lot of effort into supervising and mentoring students and PostDocs. I have one of the largest groups in my department, currently 2 PostDocs, 8 Ph.D, and 2 M.Sc. students, as well as undergraduate interns during the summer. I work closely with my students, having at least weekly meetings throughout the year, and daily interactions before conference or similar deadlines.

I take great pride in the accomplishments of my students, as illustrated by a number of awards, including Dr. Ghosh’s Alain Fournier Thesis Award (best Canadian dissertation in graphics), Dr. Seetzen’s NSERC Innovation Challenge Award, as well as a number of conference best paper awards, CRA undergraduate awards, and a multitude of university and government fellowships. More importantly, most of my students continue to do well after leaving UBC, both in industry and in academia. For example, former trainees of mine hold or have accepted positions such as Director of the HDR program at Dolby Labs (Dr. Seetzen), permanent research positions at INRIA Bordeaux (Dr. Granier) and the USC Institute for Creative Technologies (Dr. Ghosh), as well as faculty positions at Max-Planck-Institute for Computer Science (Dr. Ihrke), Bangor University (Dr. Mantiuk), and UBC (Dr. Tam).



**SEND ONE
ORIGINAL ONLY
DO NOT
PHOTOCOPY**

**APPENDIX A
Personal Data
(Form 100)**

Complete this appendix (i) if you are an applicant or co-applicant applying for the first time; (ii) if you need to update information submitted with a previous application; or (iii) if you do not hold an appointment at a Canadian postsecondary institution. For updates, include only the revised information in addition to the date, your name and your PIN.

This information will be used by NSERC primarily to contact applicants and award holders. It may also be used to identify prospective reviewers and committee members, and to generate statistics. It will not be seen or used in the adjudication process.

			Date 2009/10/22
Family name Heidrich	Given name Wolfgang	Initial(s) of all given names W.	Personal identification no. (PIN) 242351
Position and complete mailing address if your primary place of employment is not a Canadian postsecondary institution or if your current mailing address is temporary University of British Columbia 2366 Main Mall Vancouver BC V6T1Z4 CANADA			If address is temporary, indicate: Starting date Leaving date
Telephone number 1 (604) 822-4326	Facsimile number (604) 822-8989	E-mail address heidrich@cs.ubc.ca	
Telephone number (alternate)	Give an alternate telephone number only if you can be reached at that number during business hours.	Gender (completion optional) <input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	
LANGUAGE CAPABILITY			
English	Read <input checked="" type="checkbox"/>	Write <input checked="" type="checkbox"/>	Speak <input checked="" type="checkbox"/>
French	Read <input type="checkbox"/>	Write <input type="checkbox"/>	Speak <input type="checkbox"/>
I wish to receive my correspondence:		in English <input checked="" type="checkbox"/>	in French <input type="checkbox"/>
AREA(S) OF EXPERTISE			
Provide a maximum of 10 key words that describe your area(s) of expertise. Use commas to separate them. If you have expertise with particular instruments and techniques, specify which one(s). high-dynamic-range imaging, computational photography, imaging, radiometric measurements and calibration, image-based measurement, reflectance models, global illumination, physically based rendering, interactive graphics			Research subject code(s) Primary 2707
			Secondary 2603