Conseil de recherches en sciences naturelles et en génie du Canada

<b>FORM 100</b>						Date			
Personal Data Form					Daio				
				RTI				2013/0	06/17
Family name			Given name		Initial(s) of	all given names	Persona	l identific	ation no. (PIN)
Bartram					, ,				
	Linda					LR	Val	id 1	15451
	a faculty positi plete Appendic	ion at an eligible Cana es B1 and C)	adian college						
l do n	ot or will not he	old an academic appo	intment at a						
	Canadian postsecondary institution  Place of employment other than a Canadian postsecondary								
	Institution (give address in Appendix A)								
APPOINTM	ENT AT A PC	STSECONDARY I	NSTITUTION						
Title of position				Tenured or te	nure-track	Vo	v	No	
Associate	Professor			academic ap		Ye	s X	INO	
Department					Г				T.
	Arts and T	<u>'echnology, Sch</u>	ool of (SIAT)	Part-time app	pointment	Full-tir	me appoi	ntment	X
Campus				For all no	n-tenured or	non tenure-trac	k acaden	nic appoi	ntment and
Surrey				Emeritus	Professors,	complete Apper	ndices B 8	k C ''	
Canadian post	secondary inst	itution		<ul> <li>For life-tir Appendix</li> </ul>		Professor and p	oart-time	oositions	, complete
ACADEMIC	BACKGROU	IND		Appendix					
Degree		of discipline	Insti	tution		Со	untry		Date yyyy/mm
Bachelor's	Humanitie	es/Political	British Columbia			CANADA			1975 / 06
Bachelere	Science								17757 00
Grad. Dipl	Computer	Science	Concordia CANAI			CANADA			1986 / 06
Grad. Dipi	Computer	Science	Concordia			CHIMIDH			1980/00
Master's	Computer	Science	Waterloo C		CANADA			1989 / 01	
	I and I am							17077 01	
Doctorate	Computer	Science	Simon Fraser	CANADA				2001 / 06	
Doctorate	Computer	Science				CHAIDH			2001/00
TRAINING (	OF HIGHLY C	QUALIFIED PERSC	NNEL						
Indicate the nu	ımber of studer	nts, fellows and other	research personnel that	you:					
		Cı	urrently			st six years current year	r)		
Supervised		Supervised	Co-supervised	Supe	rvised	Co-superv	/ised		Total
Undergraduate			1				1		
Master's		3			7	2		12	
Doctoral	Doctoral 2 4 1			7					

Postdoctoral

Others

Total

4

1

6

2

1

21

9

**Valid** 115451

Family name

Bartram

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	Simon Fraser	Interactive Arts and Technology, School of (SIAT)	2005/07				
Research Network Manager	UBC	NECTAR (NSERCResearch Nectwork)	2004/02 to 2005/06				
Research Scientist	Colligo Networks	R&D	2001/06 to 2003/12				
Research Associate	Simon Fraser University	Computer Science	1991/01 to 2001/06				
Research Associate	University of Waterloo	Computer Science	1989/01 to 1990/11				
Research Assistant	University of Waterloo	Computer Science	1986/09 to 1988/12				
independent software consultant	School Services Ltd.		1985/03 to 1986/03				

Personal identification no. (PIN) Family name

**Valid** 115451

Bartram

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)
	ERC grants and university start-up funds) held as an applicant or a support currently held, and c) support applied for. For group grants, in the Use additional pages as required.		
a) Support held in the past 4 ye	ars		
Lyn Bartram	User Interfaces for Complex Information Environments NSERC Discovery Grant - individual 60 hours/month	20,000 20,000 20,000 20,000 20,000	2006 2007 2008 2009 2010
Lyn Bartram/Rob Woodbury	User Experience Design and Interactive Interfaces to Support Energy Conservation MITACS Accelerate BC 50 hours/month	52,000 (75%) 35,000 (75%) 17,500(100%)	2010
Lyn Bartram/Rob Woodbury	West House BC Hydro other 30 hours/month	25,000 (50%) 25,000 (50%) 25,000 (50%)	2010
Rob Woodbury and Lyn Bartram	West House Western Economic Diversification Western Economic Diversification  15 hours/month	347,500 (50%)	2010

**RESEARCH SUPPORT** 

**Valid** 115451

Family name

Years of

115451 Bartram

Family name and initial(s) of applicant	Title of proposal, funding source and program, and time commitment (hours/month)	Amount per year	tenure (yyyy)				
	ERC grants and university start-up funds) held as an applicant or a support currently held, and c) support applied for. For group grants, in the Use additional pages as required.						
a) Support held in the past 4 years	a) Support held in the past 4 years						
Lyn Bartram	Mobile Applications for Energy Management Nokia Nokia University relations 10 hours/month	7,320	2010				
Lyn Bartram/Rob Woodbury	WEST HOUSE City of Vancouver external 20 hours/month	75,000 (50%)	2010				
Lyn Bartram/Rob woodbury	Visual Histories of Decision Processes for Business Intelligence SAP ARC DoctoraL Fellowship 15 hours/month	35,000 (50%) 35,000 (50%) 35,000 (50%)	2010 2011 2012				
Lyn Bartram	Motion Frameworks for Physical Expression MITACS Accelerate BC 10 hours/month	15,000	2011				

**RESEARCH SUPPORT** 

**Valid** 115451

Family name

Bartram

Family name and initial(s)	Title of proposal, funding source and program,	Amount	Years of tenure
	and time commitment (hours/month)  ERC grants and university start-up funds) held as an applicant or a support currently held, and c) support applied for. For group grants, in		
funding directly applicable to your research	ch. Use additional pages as required.		
a) Support held in the past 4 years	ears		
L Bartram	Social MEdia Use in the Greenest City Conversations Project MITACS/GRAND NCE/City of Vancouver GRAND	11,000(100%)	2011
	10 hours/month		
Lyn Bartram	VP Research SFU internal 10 hours/month	5,000(100%)	2013
b) Support currently held  Lyn Bartram	Meaning from Motion for Visualization and Interaction NSERC Canada New Media Award 30 hours/month	127,560 (50%) 122,560 (50%) 118,560 (50%)	2009 2010 2011 2012 2013
Lyn Bartram	Human-Centred Technology for Sustainable Living/Aesthetics and Visualization GRAND Network of Centres of Excellence NCE 40 hours/month	55,000(100%) 49,500(100%) 49,500(100%) 50,000(100%) 50,000(100%)	2010 2011 2012 2013 2014

RESEARCH SUPPORT

Family name

**Valid** 115451

Bartram

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)
	SERC grants and university start-up funds) held as an applicant or a b) support currently held, and c) support applied for. For group grants, in arch. Use additional pages as required.		
b) Support currently held			
Lyn Bartram	Ambient and Ubiquitous Visualization for Sustainability NSERC Discovery 40 hours/month	14,000 14,000 14,000 14,000	2012 2013 2014 2015 2016
Lyn Bartram	West House FortisBC 10 hours/month	10,000(100%)	2013

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Canada

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# **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	
			<b>Valid</b> 115451	Bartram
Name	Type of HQP Training and Status	Years Supervised or Co-supervised	Title of Project or Thesis	Present Position
(Name withheld)	Doctoral (In Progress)	Co-supervised 2010 -	Sustainable Living Environment Design	ntal Ph.D. student
(Name withheld)	Doctoral (In Progress)	Supervised 2010 -	Expressive Motion	Ph.D student
(Name withheld)	Doctoral (In Progress)	Co-supervised 2010 -	TBD	Ph.D. student
(Name withheld)	Doctoral (In Progress)	Co-supervised 2009 -	Collaborative visual histories for creative problem-solving	or Ph.D. student
(Name withheld)	Master's (Completed)	Co-supervised 2009 - 2013	Encouraging cycling through luinterfaces	web user experience, SAP Inc.
(Name withheld)	Doctoral (Completed)	Supervised 2008 - 2013	Game Design Framework and Guidelines Based on a Theory	just graduated
(Name withheld)	Master's (Completed)	Co-supervised 2009 - 2012	Physical Properties of Motion t Expression	For Instructor, UP Open University
(Name withheld)	Master's (Completed)	Supervised 2008 - 2012	Transparency and AlphaBlendi for Visualization	ng Learning Support, Athabaska University
(Name withheld)	Master's (Completed)	Supervised 2008 - 2010	Visualizations for Sustainable Living	Senior UI Developer, Tiny Speck Inc.
(Name withheld)	Master's (Completed)	Supervised 2007 - 2009	Motion for Visualization	Software engineer, Nintendo Inc.
(Name withheld)	Master's (Completed)	Supervised 2006 - 2009	An Information Model for Critical Infrastructure Interdepend	ical software engineer
(Name withheld)	Master's (Completed)	Supervised 2006 - 2009	Visualization of Social Networking	lecturer, SIAT
(Name withheld)	Master's (Completed)	Supervised 2006 - 2007	Visualizing Causality and Dependency	Software engineer, Thomson Financial
(Name withheld)	Master's (Completed)	2003 - 2005	Role-Based Control of Shared Application Views ollected on this form and appendices wi	software engineer, Israel    John

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

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## Significant Contributions to Research and Practical Applications

1. Designing information interfaces and environments for encouraging sustainable living. I have developed a very active research program in designing information interfaces and environments for encouraging sustainable living. This work exemplifies research in practice. In collaboration with architect Professor Rob Woodbury, we began with a multi-university project to build a next-generation alternative energy house and have extended it to an extensive collaborative endeavour with multiple levels of government, academia, industry and non-profit involvement. My team has spent several years building a system and the two houses in which we have deployed it, both of which were high profile installations and showcases that in total have exposed the prototypes to over 130,000 people. In all cases I have led the team that plans these projects and guided and led the system designs. In addition, I have been largely responsible for engaging partners such as Fortis BC (gas uility), Embedded Automation (control system backbone), City of Vancouver, Future Energy, BC Hydro (electricity utility), and Pulse Energy, along with architects, landscape planners and community activists, in exploring and determining how information visualization, interactive computing and new media can help support more sustainable living.

#### **Prototypes and installations**

- Innovative visualizations for energy in the home. Interactive Exhibit, National Museum of Science and Technology, Oct 2013 (to appear).
- L. Bartram, J. Rodgers and K. Muise. The ALIS 2. Interactive Energy Management System for West House, a near net-zero sustainable home.
- L. Bartram, R. Woodbury, D. Ramslie. West House. A sustainable laneway house. West House was built in partnership with the City of Vancouver, the Government of Canada, BC Hydro and a variety of industrial contributors and is a multi-year living lab and technology research space..
- **J. Rodgers**, L. Bartram, **K. Muise**, **Y. He**. Adaptive Living Interface System, North House. A fully functional, zero-footprint, solar house. Official entry in the US DoE-sponsored International Solar Decathlon contest, Washington, DC, October 2009. 4<sup>th</sup> place finish.

# Significant Publications Note: a \* denotes a student I supervise(d) Full citation details are in the following section.

- K. Velikov, L. Bartram, G. Thün, L. Barhydt, \*J. Rodgers and R. Woodbury, "Empowering The Inhabitant: Communications Technologies, Responsive Interfaces and Living In Sustainable Buildings," in Constructing Green, MIT Press, to appear.
- AMPds: A Public Dataset for Load Disaggregation and Eco-Feedback Research. \*S. Makonin, F. Popowich, L. Bartram, R. Gill and I. Baljcic. IEEE EPEC 2013, to appear.
- A Smarter Smart Home: Case Studies of Ambient Intelligence. S. Makonin, L. Bartram and F. Popowich. IEEE Pervasive Computing, 2012.
- The Affect of Lifestyle Factors on Eco-Visualization Design. S. Makonin, M. Kashani and L. Bartram. Computer Graphics International 2012
- \*J. Rodgers and L. Bartram. Exploring ambient and artistic visualizations for residential energy use. IEEE Transactions on Visualization and Computer Graphics, 2011.
- \*S. Makonin, P. Pasquier and L. Bartram. Elements of Consumption: an Abstract Visualization of Household Consumption. Proceedings of Smart Graphics 2011, pp. 194-198. 2011
- L. Bartram and R. Woodbury. Smart Homes or Smart Occupants? Reframing Computational Design
- L. Bartram, \*J. Rodgers and R. Woodbury. Smart Homes or Smart Occupants? Supporting Aware Living in the Home.

- \*J. Rodgers, L. Bartram and R. Woodbury. Challenges in Sustainable Human- Home Interaction.
- L. Bartram, \*J. Rodgers and K. Muise. Chasing the Negawatt: Visualization for Sustainable Living.
- K. Velikhov and L. Bartram. North House: Developing Intelligent Building Technology and User Interface in Energy Independent Domestic Environments.
- **2. Motion and visualization**. I have been heavily involved in foundational work exploring the applicability of simple motion techniques to visualization for a number of applications, including data mapping, interactive techniques for brushing and linking, causal representations and most recently the more nuanced areas of affect and meaning. I hold a Canada New Media Innovation award for this latter research, and collaborate with a major Canadian game company (Radical Entertainment) and an international 3D visualization and modeling company (Autodesk, Inc). My earlier work in motion in visualization is considered seminal in the field and continues to be heavily cited [A9] [A11].

#### **Significant Publications**

- \*M. Lockyer and L. Bartram. Affective Motion Textures. Computers & Graphics, 2012.
- \*M. Lockyer, L. Bartram and B. Riecke. Simple Motion Textures for Ambient Affect. Proceedings of the International Symposium on Computational Aesthetics in Graphics, Visualization, and Imaging, CAe '11, Eurographics, 2011, pp 98-96. Winner, Best Paper.
- L. Bartram and \*Ai Nakatani. Distinctive Parameters of Expressive Motion. Proceedings of Computational Aesthetics 2009, June 2009, p 129-137.
- L. Bartram and \*Ai Nakatani. What Makes Motion Meaningful? Exploring the affective properties of abstract motion, Proceedings of Pacific Symposium in Image and Video Technology, 2010.
- L. Bartram and \*M. Yao. Animating Causal Overlays. Computer Graphics Forum 27(3): 751-758, 2008.
- 1. **Exploring the perceptual basis for design methods in visualization**. I am empirically and analytically investigating how approaches from visual design can be computationally modeled for improving the balance of visual elements and the accompanying layering hierarchy in dynamic visualizations. Some contributions to the field include:
- L. Bartram, \*B. Cheung and M. Stone. The Effect of Colour and Transparency on the Perception of Overlaid Grids. IEEE Transactions on Visuaization and Computer Graphics, accepted, to appear.
- L. Bartram and M. Stone. Whisper, Don't Scream: Grids and Transparency. IEEE Transactions on Visualization and Computer Graphics, 17(10), pp 1444-1458, 2011.
- M. Stone and L. Bartram. Alpha, Contrast and the Perception of Visual Metadata. Proceedings of the Color Imaging Conference 2008, Portland, 2008.
- L. Bartram and M. Stone, Characterising Subtle Grids, Winner, Best Poster, IEEE Visualization 2007.
- Design, Vision and Visualization. Workshop organiser, IEEE Visualization, 2008.

## Recent Research and Practical Contributions

Refereed journal papers

- **A1. \*S. Makonin**, L. Bartram, and F. Popowich, "A Smarter Smart Home: Case Studies of Ambient Intelligence," Pervasive Computing, IEEE, vol. 12, no. 1, pp. 58–66. 2013.
- A2. \*M. Lockyer and L. Bartram. Affective motion textures, Computers & Graphics. 36(6), pp. 776-790. 2012.
- A3. \*J. Rodgers and L. Bartram. Exploring Ambient and Artistic Visualizations for Residential Energy Use. IEEE Transactions on Visualization and Computer Graphics, December 2011, 17(12):2489-97.
- A4. Bartram, Lyn; \*Cheung, Billy; Stone, Maureen; The Effect of Colour and Transparency on the Perception of Overlaid Grids IEEE Transactions on Visualization and Computer Graphics, 17 (12), 2011, pp 1942 1948
- A5. \*J. Rodgers, L. Bartram, and R. Woodbury. 2011. Challenges in sustainable human-home interaction. ACM XRDS 17, 4 (June 2011), 42-46.
- A6. L Bartram and M. Stone. Whisper, Don't Scream: Grids and Transparency. IEEE Transactions on

- Visualization and Computer Graphics, 17 (10), Oct. 2011, pp. 1444-1458.
- A7. L. Bartram, \*J. Rodgers and K. Muise. Chasing the Negawatt: Visualization for Sustainable Living. IEEE Computer Graphics and Applications, 30 (3), pp. 8-14.
- A8. L. Bartram and \*M. Yao. Animating Causal Overlays. Computer Graphics Forum 27(3): 751-758, 2008
- A9. L. Bartram, C. Ware and T. Calvert. Moticons: Detection, Distraction and Task. International Journal of Human-Computer Studies, 58(5), pp. 515-545, 2003
- A10. D. S. McCrickard, M. Czerwinski, L. Bartram: Introduction: design and evaluation of notification user interfaces. International Journal of Human-Computer Studies. 58(5), pp. 509-514. 2003
- A11. L. Bartram and C. Ware. Filtering and Brushing With Motion. Journal of Information Visualization, 1(1), pp. 66-79. 2002

#### Refereed Archival Conference Papers

A12.	<b>*S. Makonin</b> , F. Popowich, L. Bartram, R. Gill and I. Baljcic. AMPds: A Public Dataset for Load Disaggregation and Eco-Feedback Research. IEEE EPEC 2013, to appear	2013
A13.	*D. Milam, M. Seif el-Nasr, and L. Bartram. Visual Motion in a Railed Shooter Game: A Designer Study. Foundations of Digital Games 2013.	2013
A14.	*Stephen Makonin, *Maryam H Kashani and Lyn Bartram. The Affect of Lifestyle Factors on Eco-Visualization Design. Computer Graphics International 2012 (CGI 2012), pp 1-10.	2012
A15.	*D. Maranan, T. Schiphorst, L. Bartram and A. Hwang. Expressing Technological Metaphors in Dance Using Structural Illusion from Embodied Motion. ACM Creativity and Cognition 2013, to	2013
A16.	appear.  *M. Lockyer and L. Bartram. "The aMotion Toolkit: Painting with Affective Motion Textures".	2012
	Proceedings of Computational Aesthetics (CAe 2012), Eurographics, pp. 35-43.	
A17.	*D. Milam, M. Seif El-Nasr, L. Bartram, B. Aghabeigi, and P. Tan, Similarity in Visual Designs:	2012
	Effects on Workload and Performance in a Railed-Shooter game, in 11th International Conference	
	on Entertainment Computing (ICEC), Bremen, Germany	
J. Ro	odgers and L. Bartram. Exploring Ambient and Artistic Visualizations for Residential Energy Use.	2011
	IEEE Conference on Information Visualization 2011, Rhode Island, to appear. (25% acceptance	
	rate). 8 pages	
A18.	L. Bartram, M. Stone and *B. Cheung. The effect of color and transparency on the perception of	2011
1.10	overlaid grids. IEEE Conference on Visualization 2011, Rhode Island, accepted, to appear.). 8 pages	
A19.	*M. Lockyer, L. Bartram and B. Rieke. Simple Motion Textures for Ambient Affect. In	2011
	Proceedings of Computational Aesthetics 2011 Eurographics Conference on Computational	
	Aesthetics in Graphics, Visualization and Imaging, Cae'11, Vancouver, BC, Canada. 8 pages. Winner, Best Paper.	
A 20	Subyen, P., * Maranan, D. S., Schiphorst, T., Pasquier, P., Bartram, L. EMVIZ: The Poetics of	2011
1120.	Movement Quality Visualization. In Proceedings of Computational Aesthetics 2011 Eurographics	2011
	Conference on Computational Aesthetics in Graphics, Visualization and Imaging, Cae'11,	
	Vancouver, BC, Canada. 8 pages.	
A21.	L. Bartram, *J. Rodgers and R. Woodbury. Smart Homes or Smart Occupants? Supporting Aware	2011
	Living in the Home. Proceedings of IFIP INTERACT 2011, Lisbon, Portugal, pp. 52-65.	
A22.	L. Bartram and R. Woodbury. Smart Homes or Smart Occupants? Reframing Computational	2011
	Design Models for the Green Home. Proceedings of the AAAI Spring Symposium, Mar 2011, Palo	
	Alto, CA. 8 pages	
A23.	*K. Kozlova, R. Sheikholeslami, L. Bartram, R. Woodbury. "Graph Visualization in Computer-	2011
	Aided Design. An Exploration of Alternative Representations for Generative Components Symbolic	
	View" Proceedings of the 16th International Conference on Computer Aided Architectural Design	
121	Research in Asia (CAADRIA), 27-29 April 2011. 10 pages	
A24.	.L. Bartram and *A. Nakatani. What Makes Motion Meaningful? Exploring the affective properties of abstract motion, Proceedings of Pacific Symposium in Image and Video Technology, 2010., pp.	2010

	468-474	
A25.	*M. Erfani Joorabchi, A. Dalvandi, H. Seifi, L. Bartram, and C. D. Shaw . Visualizing Search	2010
	Results: Evaluating an Iconic Visualization, Proceedings of VDA 2010 Conference on Visualization	
	and Data Analysis 2010, San Jose, California, January 18-21, 2010. 8 pages.	
A26.	K. Velikov and L. Bartram. North House: Developing Intelligent Building Technology and User	2009
	Interface in Energy Independent Domestic Environments. In Architecture, Energy and the	
	Occupant's Perspective, Proceedings of PLEA2009, pp. 67-78	
A27.	L. Bartram and *A. Nakatani. Distinctive Parameters of Expressive Motion. Proceedings of	2009
	Computational Aesthetics 2009, June 2009. 8 pages.	
A28.	J.D. Yim, C. Shaw and L. Bartram. MusicianMap: Visualizing Music Collaborations Over Time.	2009
	Proceedings of VDA 2009 Conference on Visualization and Data Analysis 2009, San Jose,	
	California, January 19-22, 2009. 8 pages.	
A29.	M. Stone and L. Bartram. Alpha, Contrast and the Perception of Visual Metadata. in Proceedings of	2008
	the 16th IS&T/SID Color Imaging Conference (Portland November 11-14, 2008), pp 355-359.	
A30.	* L. Berry, L. Bartram and K.S. Booth. Role-Based Policies to Control Shared Application Views.	2005
	UIST '05, Seattle, Wa. 8 pages.	
Refe	reed Posters/Short Papers	
S1.	L. Bartram. Policy, Permitting and Prototyping: the Challenges of Implementing Change.	2011
	Engineering Sustainability 2011, Pittsburgh, PA. 3 pages.	
S2.	L. Bartram and *J. Rodgers. Sustainability Is More Than Green Buildings. Engineering	2011
	Sustainability 2011, Pittsburgh, PA. April 2011. Short paper, 2 pages.	
S3.	L. Bartram. Designing for Sustainable Living: Challenges from the Field. ACM CHI	2011
	Workshop on HCI, Politics and the City, CHI 2011.	
S4.	L. Bartram, *J. Rodgers and K. Muise. Supporting Sustainable Living: Aware Homes And	2010
	Smart Occupants. Workshop on Ubiquitous Computing for Sustainable Energy, Ubicomp	
	2010, ACM.	
S5.	L. Bartram, *J. Rodgers and K. Muise. Supporting Sustainable Living: Aware Homes And	2010
	Smart Occupants. Workshop on Ubiquitous Computing for Sustainable Energy, Ubicomp	
	2010, ACM.	
S6.	* J. Rodgers, L. Bartram. "Visualizing Residential Resource Use: A Framework for Design."	2010
	Proceedings of InfoVis 2010.	
S7.	* J. Rodgers, L. Bartram. "ALIS: An Interactive Ecosystem for Sustainable Living."	2010
	Proceedings of UbiComp 2010.	
S8.	* J. Rodgers, L. Bartram, *J. Fan. "Ambient and Artistic Visualization of Residential	2010
	Resource Use," Proceedings of Graphics Interface, 2010.	
S9.	Y. He, X. Yan and L. Bartram. Spatial Frequency for Image Search. Poster, ACM Conference	2008
	on Applied Perception and Visualization in Graphics, (APGV) 2008.	
S10.	L. Bartram. Designing support for managing critical infrastructure interdependencies in	2008
	emergencies. Workshop on HCI For Emergencies, ACM CHI 2008	
S11.	L. Bartram. Designing Transparent Overlays. Workshop on Design, Vision and Visualization.	2008
	IEEE Visualization 2008.	
S12.	L. Bartram and M. Stone. Characterising Subtle Grids. Winner, Best Poster, IEEE	2006
	Visualization 2007.	
S13.	L. Bartram, M.Stone and D. Gromala. Great Grids: How and Why. Applied Perception in	2006
	Computer Graphics and Visualization 2006.	

# Contributions to practical applications

#### Patents and technology transfer

[B1] L. Bartram and N. Sawadsky. Codeword-Enhanced Peer-to-peer Authentication. US Patent Application U.S. Patent # 7,293,284, issued, November 6, 2007.

2011

- [B2] L. Bartram, M. Chesser, N. Sawadsky, S. Schumacher and M. Blackstock. Peer-to-peer Authentication for Real-Time Collaboration. US Patent # 7392375. Issued 2009.
- [B3] R. Dembo and L. Bartram. System And Method For Generating, Processing And Displaying Data Relating To Consumption Data With An Application. US Patent Application, filed Sept. 14, 2011; revised Sept. 14, 2012. Patent filed by Zero Footprint, Inc.

#### Prototypes, systems and installations

2.	J. Rodgers and L. Bartram. Ambient energy displays for residential energy use.	2010
3.	L. Bartram, * J. Rodgers, K. Muise and R. Mackenzie. The Aware Living Interface System (ALIS): Version 2. Interactive Energy Management System for PC, mobile and embedded home use.	2011
4.	L. Bartram, R. Woodbury, D. Ramslie. West House Living Lab 2011. A sustainable laneway house. West House was moved and extended from its original construction. It is a multi-year project with the City of Vancouver, BC Hydro and a variety of industrial contributors and is a multi-year tenanted living lab. It incorporates renewable energy technologies, water and gas metering, smart metering and interactive technologies, and social media outreach.	2011
5.	. Bartram, R. Woodbury, D. Ramslie. West House SFU sustainable laneway home, version 1. West House was built in partnership with the City of Vancouver, BC Hydro and a variety of industrial contributors	2010
6.	• Showcased at the 2010 Olympics (>66,000 visitors)  * J. Rodgers, K. Muise, L. Bartram, Y. He and R. Mackenzie. The Aware Living Interface System (ALIS): Version 1. Interactive Energy Management System for PC, mobile and embedded home use.	2009
7.	G. Thun, K. Velikov, L. Bartram, R. Woodbury, A.Fung. North House. A fully functional, zero-footprint, solar house.	2009
	4 <sup>th</sup> place, 2009 International Solar Decathlon, Washington, DC (> 65,000 visitors)	

#### **Awards**

installation, Chile.

• Finalist, Surrey City Green Energy Awards, in partnership with Embedded Automation Inc,

M. Lockyer (from work done with L. Bartram and P. Pasquier). Kinetic art, oublic art

- North House. 2011 RAIC Award of Excellence for Innovation in Architecture. Given by the Royal Architectural Institute of Canada, this is the only major Canadian architectural award program that recognizes design/research.
- ALIS/North House. R&D Award, Best Green Design. Architect Magazine
  - Architect Magazine is one of the two top magazines in the field of professional architecture. The award was given to the North House project on the strength of the ALIS design and implementation

# Contributions to the Training of Highly Qualified Personnel (HQP)

I have supervised to graduation 8 Masters' students, 2 of whom I co-supervised, and 1 PhD student. 8 of the Masters graduates are currently employed in industry (7) and academia (1); the other is a current PhD student. I currently supervise or co-supervise 6 PhD students and 2 Masters' students with one incoming in the fall.

Conseil de recherches en sciences naturelles et en génie du Canada

#### 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 use	ed by NSERC prima	arily to contact applicants and	award holders. It may al	so be	Date	
	e reviewers and cor	nmittee members, and to gen			201	3/06/17
Family name		Given name	Initial(s) of all give	n names	Personal idea	ntification no. (PIN
Bartram		Linda	LR		Valid	115451
		r primary place of employmer ailing address is temporary	t is not a Canadian		If address is indicate:	temporary,
					Starting date	)
					Leaving date	9
Telephone number		Facsimile number	E-mail address			
1 (778) 7827439		(778) 7827488	lyn@sfu.ca			
Telephone number (altern	ate)	Give an alternate telen	hone number only if you	ı can	Gender (con	npletion optional)
1 (604) 9089954			nber during business ho		Male	Y Femal
LANGUAGE CAPABIL	ITY					
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Form 100, Appendix A (2009 W)

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#### Appendix D (Form 100) **Consent to Provide Limited Personal Information About** Highly Qualified Personnel (HQP) to NSERC

NSERC applicants are required to describe their contributions to the training or supervision of highly qualified personnel (HQP) by providing certain details about the individuals they have trained or supervised during the six years prior to their current application. HQP information must be entered on the Personal Data Form (Form 100). This information includes the trainee's name, type of HQP training (e.g., undergraduate, master's, technical etc.) and status (completed, in-progress, incomplete), years supervised or co-supervised, title of the project or thesis, and the individual's present position.

Based on the federal Privacy Act rules governing the collection of personal information, applicants are asked to obtain consent from the individuals they have supervised before providing personal data about them to NSERC. In seeking this consent, the NSERC applicant must inform these individuals what data will be supplied, and assure them that it will only be used by NSERC for the purpose of assessing the applicant's contribution to HQP training. To reduce seeking consent for multiple applications, applicants will only need to seek consent one time for a six-year period. If the trainee provides consent by e-mail, the response must include confirmation that they have read and agree to the text of the consent form.

When consent cannot be obtained, applicants are asked to not provide names, or other combinations of data, that would identify those supervised. However, they may still provide the type of HQP training and status, years supervised or co-supervised, a general description of the project or thesis, and a general indication of the individual's present position if known.

#### An example of entering HQP information on Form 100 (with and without consent):

Name	Type of HQP Training and Status	Years Supervised or Co-supervised	Title of Project or Thesis	Present Position
<b>Consent Recei</b>	ved from Marie Roy	/		
Roy, Marie	Undergraduate (Completed)	Supervised 1994 - 1997	Isotope geochemistry in petroleum engineering	V-P (Research), Earth Analytics Inc., Calgary, Alberta
<b>Consent Not O</b>	btained from Marie	Roy		
(name withheld)	Undergraduate (Completed)	Supervised 1994 - 1997	Isotope geochemistry	research executive in petroleum industry - western Canada

#### **Consent Form**

Name of Trainee		
Applicant Information		
Name Bartram, Linda LR		
Department	Postsecondary Institution	
Interactive Arts and Technology, School of (SI	Simon Fraser	
I hereby allow the above-named applicant to include limit consideration to NSERC for the next six years. This limit status, years supervised or co-supervised, title of the proposition title and company or organization at the time the this data in accordance with the <i>Privacy Act</i> , and that it contributions to the training of highly qualified personnel	ted data will only include my name, to the best of the eapplication is submitted. I understawill only be used in processes that a	type of HQP training and applicant's knowledge, my and that NSERC will protect assess the applicant's
Trainee's signature	Date	
Note: This form must be retained by the applicant and ma	ade available to NSERC upon reque	est.
Form 100, Appendix D (2009 W) PROTEC	TED WHEN COMPLETED	Version française disponible

