Natural Sciences and Engineering Research Council of Canada | Conseil de recherches en sciences naturelles et en génie du Canada

FORM 100
Personal Data Form
PART I

Date: 2011/10/23

Family name	Given name	Initial(s) of all given names	Personal identification no. (PIN)
McGrenere	Joanna	JL	166692

☐ 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

Department: Computer Science

Campus:

Canadian postsecondary institution: British Columbia

Tenured or tenure-track academic appointment — Yes [X] No [ ]

Part-time appointment [ ] Full-time appointment [X]

- 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

ACADEMIC BACKGROUND

Degree	Name of discipline	Institution	Country	Date yyyy/mm
Bachelor's	Computer Science	Western Ontario	Canada	1993 / 04
Master's	Computer Science	British Columbia	CANADA	1996 / 07
Doctorate	Computer Science	Toronto	CANADA	2002 / 01

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)		
	Supervised	Co-supervised	Supervised	Co-supervised	Total
Undergraduate			3	2	5
Master's	2	4	3	8	17
Doctoral	1	1	2	3	7
Postdoctoral	1				1
Others					
Total	4	5	8	13	30

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

PROTECTED WHEN COMPLETED

Version française disponible

Completed

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	2008/07
Visiting Scientist	IBM Toronto Lab	Centre for Advanced Studies	2003/01 to 2009/12
Assistant Professor	University of British Columbia	Computer Science	2002/07 to 2008/06
CAS Fellowship Student	IBM Toronto Lab	Centre for Advanced Studies	1999/01 to 2001/12
Summer Researcher	IBM Toronto Lab	Centre for Advanced Studies	1997/06 to 1997/10
Teaching Assistant	University of Toronto	Computer Science	1996/09 to 1999/05

Personal identification no. (PIN)	Family name
166692	McGrenere

RESEARCH SUPPORT

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.

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)
a) Support held in the past 4 years			
Ronald Baecker and 13 others	NECTAR - Network for Effective Collaboration Technologies through Advanced Research NSERC Research Network 20 hours/month	1,100,000 (0%) 1,100,000 (6%) 1,100,000 (6%) 1,100,000 (6%) 1,100,000 (6%)	2004 2005 2006 2007 2008
Peter Graf and 2 others	Technology usability across the adult lifespan CIHR Institute of Aging, Operating Grant 20 hours/month	68,000 (40%) 68,000 (40%) 68,000 (40%)	2005 2006 2007
Karon MacLean and 2 others	HALO: Transparent Guidance of Networked Interactions Through a Haptic-Affect Loop NSERC Strategic Projects 16 hours/month	150,000 (30%) 164,500 (30%) 166,500 (30%)	2008 2009 2010
Claudia Jacova and 2 others	Development of a Computer-based Screening Test to Support Evaluation for Cognitive Impairment and Dementia in BC UBC CIHR Pillars II & IV Development Seed Funding 4 hours/month	5,000 (33%)	2008

PROTECTED WHEN COMPLETED

Canada

Personal identification no. (PIN)	Family name
166692	McGrenere

RESEARCH SUPPORT

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.

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)
a) Support held in the past 4 years			
Perry Cook and 1 other	Mixed-initiative Visual Vocabulary Application for People with Aphasia Microsoft 4 hours/month	50,000 (24%)	2008
Joanna McGrenere	Improving the learnability of mobile applications for older people using multi-layered interfaces Nokia University Relations 2 hours/month	5,000	2008
Joanna McGrenere	Smart Interactions in the Jazz Collaborative Development Environment IBM IBM Faculty Award 4 hours/month	10,000	2009
Claudia Jacova and 4 others	Development of a Computer-Based Screening Test to Support the Evaluation of Cognitive Impairment and Dementia in British Columbia CIHR Catalyst Grant: Pilot Project in Aging 12 hours/month	50,000 (30%)	2009

Personal identification no. (PIN)	Family name
166692	McGrenere

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			
Joanna McGrenere	Designing and Evaluating Novel Smartphone Applications Using Advanced HCI Methodology Google Google University Relations 1 hours/month	4,908	2010
Joanna McGrenere	Developing innovative and usable smart phone technologies for older adults NSERC Engage 4 hours/month	24,265	2010
Joanna McGrenere	Peter Wall Institute for Advanced Studies Early Career Scholars 2 hours/month	10,000	2010
b) Support currently held			
Joanna McGrenere	Design and Evaluation of Adaptive and Adaptable Information Technology NSERC Discovery Grants 16 hours/month	30,000 30,000 30,000 30,000 30,000	2007 2008 2009 2010 2011

Personal identification no. (PIN)	Family name
166692	McGrenere

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.

b) Support currently held			
Kellogg Booth and ~65 others	Graphics, Animation, and New Media (GRAND) NSERC NCE 20 hours/month	4,600,000 (1%) 4,600,000 (1%) 4,600,000 (1%) 4,600,000 (1%) 4,600,000 (1%)	2010 2011 2012 2013 2014
c) Support applied for			
Claudia Jacova and 6 others	Exploring and validating the contributions of C-TOC (Cognitive Testing On Computer): Use in clinical assessment CIHR Institute of Aging, Operating Grant 12 hours/month	99,458 (33%) 167,610 (29%) 174,649 (27%)	2012 2013 2014

PROTECTED WHEN COMPLETED

Canada

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
166692	McGrenere

Name	Type of HQP Training and Status	Years Supervised or Co-supervised	Title of Project or Thesis	Present Position
Brehmer, Matthew	Doctoral (In Progress)	Co-supervised 2011 -	Interruptions and Older Users	PhD Student, Computer Science, UBC
Dawson, Jessica	Master's (In Progress)	Co-supervised 2011 -	The Impact of Local and Global Neighbourhoods in InfoVis	MSc Student, Computer Science, UBC
Haddad, Shathel	Master's (In Progress)	Supervised 2011 -	Interface Design to Support Cultural Diversity in C-TOC	MSc student, Computer Science, UBC
Haraty, Mona	Doctoral (In Progress)	Supervised 2011 -	Personalizing Task Management	PhD Student, Computer Science, UBC
Link, Juliette	Master's (In Progress)	Co-supervised 2011 -	Coordinated Two Handed Input: Mouse and Keyboard	MSc Student, Computer Science, UBC
Tam, Diane	Master's (In Progress)	Co-supervised 2010 -	Haptic Notifications to Support Timely Presentations	MSc Student, Computer Science, UBC
Tang, Charlotte	Postdoctoral	Supervised 2010 -	Designing Technologies for Older Users	Postdoc, Computer Science, UBC
Himmetoglu, Gokhan	Master's (In Progress)	Co-supervised 2009 -	Designing the Haptic-Affect Loop: A second iteration	MSc student, Computer Science, UBC
Rajamanickam Mohan	Master's (In Progress)	Supervised 2009 -	Personalized User Interfaces for Children in Open Source App	MSc Student, Computer Science, UBC
Kanupriya	Undergraduate (Completed)	Supervised 2011 - 2011	Designing Help Kiosk for Older Users Learning Smartphones	Undergrad Student, Indian Institute of Technology Guwahati
Mehrabian, Amirhossein	Master's (Completed)	Supervised 2010 - 2011	Designing the Haptic-Affect Loop: Desiging For Interruptions	Microsoft, Redmond WA
Brehmer, Matt	Master's (Completed)	Supervised 2009 - 2011	Online Screening Tool for the Early Detection of Dementia	PhD Student, Computer Science, UBC
Chang, Gordon	Master's (Completed)	Co-supervised 2009 - 2011	Designing the Haptic-Affect Loop: Comparing Task Contexts	Microsoft, Redmond WA
Dawson, Jessica	Undergraduate (Completed)	Co-supervised 2009 - 2011	Ephemeral Adpatation for a Graph Visualization Task	MSc student, Computer Science, UBC
Leung, Rock	Doctoral (Completed)	Co-supervised 2006 - 2011	Usability of Mobile Devices Across the Lifespan	Manager, Academic Research Center (ARC), North America,
Hendy, Jeff	Doctoral (Not Completed)	Co-supervised 2010 - 2010	Continuation of Graphically Enhanced Keyboard Accelerators	Web Designer, small hedge fund, New York City
Ingriany, Vilia	Undergraduate (Completed)	Supervised 2010 - 2010	RA Study about Learnability of Mobile Devices by Older Users	SAP, Vancouver
Link, Juliette	Undergraduate (Completed)	Co-supervised 2010 - 2010	RA: Dialog Boxes using Graphically Enhanced	MSc student, Computer Science, UBC
Hazelton, Tom	Master's (Completed)	Co-supervised 2008 - 2010	Designing the Haptic-Affect Loop: A first iteration	Research Assistant, UBC
Moffatt, Karyn	Doctoral (Completed)	Supervised 2004 - 2010	Addressing Age-related Pen-based Target Acquisition Diff.	Assistant Professor, McGill University

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
166692	McGrenere

Name	Type of HQP Training and Status	Years Supervised or Co-supervised	Title of Project or Thesis	Present Position
Hendy, Jeff	Master's (Completed)	Co-supervised 2008 - 2009	Graphically Enhanced Keyboard Accelerators	web designer, small hedge fund, New York City
Findlater, Leah	Doctoral (Completed)	Supervised 2004 - 2009	Personalized GUI Awareness and Peformance	Assistant Professor, University of Maryland, College Park
Yuen, Sandra	Undergraduate (Completed)	Supervised 2007 - 2008	Improving Pen-based Input for Older Users	IBM Research
Htun, Yamin	Master's (Completed)	Co-supervised 2005 - 2007	Annotation Bundles to Support Collaborative Writing	SAP, Vancouver
Bunt, Andrea	Doctoral (Completed)	Co-supervised 2003 - 2007	Mixed-Initiative Support for Customizing GUIs	Assistant Professor, University of Manitoba
Allen, Meghan	Master's (Completed)	Supervised 2004 - 2006	PhotoTalk: a Digital Image Based Application for Aphasics	Instructor, UBC Computer Science
Gluck, Jennifer	Master's (Completed)	Supervised 2004 - 2006	Matching Attentional Draw with Utility in Interruption	Computer Science & Math teacher, Ottawa
Bodnar, Adam	Master's (Completed)	Co-supervised 2003 - 2006	An Evaluation of Overviews for Large Tree Navigation	Senior Consultant, ESRI Canada, Ottawa
Nekrasovski, Dmitry	Master's (Completed)	Co-supervised 2003 - 2005	A Comparison of Pan and Zoom and Rubber-Sheet Navigation	Mobile User Experience Design Lead at Open Text, Ottawa
Zheng, Qixing	Master's (Completed)	Co-supervised 2003 - 2005	Design and Evaluation of Collaborative Writing	Program Manager, Windows User Experience, Microsoft, Redmond

1. Most Significant Contributions to Research and Practical Applications (2005 – 2011)

A. The Aphasia Project: I co-founded the Aphasia Project in late 2002, right after starting as an assistant professor at UBC. The Aphasia Project was a multi-disciplinary multi-university project spanning computer science, human-computer interaction (HCI), psychology, and speech and language pathology, focusing on the design and evaluation of technology to support people with aphasia in their daily lives. Aphasia is an acquired language disorder with relative sparing of other cognitive abilities. I led the project, despite having no background in aphasia. It operated across UBC and Princeton. The highlights include many refereed publications [J3,4; C6,8,10,12,20] and our two-day workshop on cognitive technologies at CHI 2006 [O7]. Before the Aphasia Project, there had been little assistive technology research focussing on cognitive impairments because of the significant challenges inherent in this work. Our 2006 workshop was the first to cover this topic area and was oversubscribed, showing the keen interest in the community. I received the Anita Borg Early Career Scholar Award (2004), in part for my leadership on the Aphasia Project. I also received the Peter Wall Institute for Advanced Studies Early Career Scholar Award (2010), largely in recognition of my multi-disciplinary research on this project. I have given many invited lectures about this project (e.g., Princeton, U Waterloo, U Toronto, Queen's U). Microsoft provided funding for this project in 2008, and it was otherwise funded by UBC start-up funds and NSERC.

B. Designing Technology for Older Users: The Aphasia Project led naturally to the problem of designing technology for healthy older adults: we saw in the broader older population some of the HCI challenges experienced by people with aphasia. For example, when we noticed that some of the participants with aphasia had a hard time selecting targets (such as icons and menus) in a pen-based mobile planner application [C8], we began to investigate more generally how older users manage pen-based mobile devices. We uncovered three sources of target acquisition difficulty: slipping, drifting, and missing just below [C19, best paper]. We then designed and implemented several novel interaction techniques to address each observed error and conducted rigorous laboratory studies to evaluate their impact [J5, C23, C25]. A particular strength of this body of research, including my other research with older users [J6, J8], is that we systematically include both older (65+) and younger participants, resulting in techniques that sometimes improve human-computer interaction for both older and younger users alike, but never disadvantage younger users. I am a member of the GRAND NCE (see below) project on "Accessibility of New Media for Disabled, Elderly, and Vulnerable Individuals." I was also asked to join the ACM TACCESS journal editorial board for my work in this area and on aphasia. This research has been funded by NSERC, CIHR, the GRAND NCE, and Nokia, who provided a small amount of funds in 2008.

C. Personalized Graphical User Interfaces: I am a leader in user interface personalization. My work has broadened the understanding of personalization as a design alternative to all-in-one interfaces. This work employs many methods ranging from qualitative field evaluations to tightly controlled laboratory studies. The work continues to generate many refereed publications [J1,7; C15,16,17,18,21,22,24,26,27], including two best paper awards [C15 & C24]. As an example, [C24] is about the ephemeral adaptation technique, an interaction technique designed to visually cue users to the most salient features in the interface (personalized based on their individual usage) without negatively impacting their ability to choose from the full feature set, which fades in after a pre-set delay. The ephemeral adaptation technique was applied to the Google homepage within months of our paper publication, affecting millions of users. It was removed with the introduction of a totally new menu bar (black bar across the top). Our ephemeral adaptation technique was also featured in a graduate course at Harvard, taught by Dr. K. Gajos. My research program on personalization has led to strong ties with Microsoft and IBM Canada since 1998. I have held IBM Faculty Awards (2004-07, 09) and have been an IBM Visiting Scientist (2003-09) for

research in this area. Other funding has come from NSERC. My prominence in this area is demonstrated by my involvement in GRAND (GRaphics, Animation and New meDia), a Network of Centres of Excellence (2010-present), where I am project co-leader for the "Personalized User Interfaces and Learnability" project.

D. HQP Training and the Promotion of Women in Computer Science: HQP training is one of my strongest research contributions. I elaborate on the general mentoring and training my students receive in Section 5 below. Of the 28 graduate students I have supervised or co-supervised to date, counting both MSc and PhD students, 14 are females. Thus I am graduating 50% women from my program. By contrast, the North American rate for females in Computer Science programs is on the decline, dipping to 10-20% (undergraduate being closer to 10% and graduate closer to 20%). This drop has garnered considerable concern in our field. My first 3 PhD students to graduate were female (Bunt, Findlater, and Moffatt). All three have secured tenure-track positions. The training and mentorship I provide and the research questions I address are clearly attractive to females interested in pursuing Computer Science.

2. Recent Research Contributions (2005 – 2011)

Order of authorship is determined by the contribution of each author. When authors make roughly equivalent contributions, alphabetical ordering is used. The one exception is that in all cases where I have made roughly equal contributions with my students, I list myself after the students. In HCI, top-tier conferences are competitively peer-reviewed, journal length, and are often considered almost equivalent to journal publications. Papers for which the reviewing may have been of lesser quality (fewer than 3 reviewers or acceptance rates (AR) above 40%) are separated into the lightly refereed category below.

As per NSERC guidelines, student names are in boldface and funding sources are identified.

Refereed Journal Articles [Jnn]

J8. **Leung, R.**, **Findlater, L.**, McGrenere, J., and Graf, P. (2010). Multi-layered interfaces to improve older adults' initial learnability of mobile applications. *ACM Transactions on Accessible Computing*. 3(1), Article 1, 1-30. (CIHR/NSERC)

J7. **Findlater, L.**, and McGrenere, J. (2010). Beyond performance: Feature awareness in personalized interfaces. *Intl. Journal of Human-Computer Studies*, 68(3), 121-137. (NSERC)

J6. **Leung, R.**, McGrenere, J., and Graf, P. (2009). Age-related differences in the initial usability of mobile device icons. *Behaviour & Information Technology*, First published on: 22 September 2009 (iFirst). (CIHR/NSERC/Nokia)

J5. **Moffatt, K.**, and McGrenere, J. (2009). Exploring methods to improve pen-based menu selection for younger and older adults. *ACM Transactions on Accessible Computing*, 2(1), Article no 3, 1-32. (NSERC)

J4. **Allen, M.**, McGrenere, J., and Purves, B. (2008). The field evaluation of a mobile digital image communication application designed for people with aphasia. *ACM Transactions on Accessible Computing*. 1(1), Article 5, 1-26. (NSERC)

J3. **Allen, M., Leung, R.**, McGrenere, J., and Purves, B. (2008). Involving domain experts in assistive technology research. *User Access in the Information Society*. 7(3), 145-154. (NSERC)

J2. **Chan, A.,** MacLean, K., and McGrenere, J. (2008). Designing haptic icons to support collaborative turn-taking. *Intl. Journal of Human Computer Studies*, 66(5), 333-355. (NSERC)

J1. McGrenere, J., Baecker, R.M., and Booth, K.S. (2007). A field evaluation of an adaptable two-interface design for feature-rich software. *ACM Transactions on Computer-Human Interaction*. 14(1), article no 3. (43 pages) (NSERC)

Refereed Conference Articles [Cnn]

C27. **Hendy, J.**, **Link, J.**, Booth, K.S., and McGrenere, J. (2011). Parameter selection in keyboard-based dialog boxes. In *Proceedings of the 29th International Conference on Human Factors in Computing Systems*, CHI '11. ACM Press, 2761-2764. (AR: 400/1540 = 26.0%) (NSERC)

C26. **Hendy, J.**, Booth, K.S., and McGrenere, J. (2010). Graphically enhanced keyboard accelerators for GUIs. To appear in *Proceedings of Graphics Interface 2010* (Ottawa, Ontario, Canada, Mar 31 – June 2, 2010). GI 2010. Canadian Human-Computer Communications Society, 3-10. (AR: 33/88 = 37.5%) (NSERC)

C25. **Moffatt, K.,** and McGrenere, J. (2010). Steadied-bubbles: Combining techniques to address pen-based pointing errors for younger and older adults. In *Proceedings of the 28th international Conference on Human Factors in Computing Systems*. CHI '10. ACM Press, 1125-1134. (AR: 302/1346 = 22.4%) (NSERC)

C24. **Findlater, L., Moffatt, M.**, McGrenere, J., **Dawson, J.** (2009). Ephemeral adaptation: The user of gradual onset to improve menu selection performance. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. CHI '09. ACM Press, 1655-1664. ***Best paper award.*** (AR: 277/1130 = 24.5%, Best paper AR: 7/1130 = 0.6%) (NSERC)

C23. **Moffatt, K.,** and McGrenere, J. (2008). Hover or tap? Supporting pen-based menu navigation for older adults. *Proceedings of the 10th International ACM SIGACCESS Conference on Computers and Accessibility*. Assets '08. ACM Press, 51-58. (AR: 157/714 = 37%) (NSERC/CIHR)

C22. **Findlater, L.**, and McGrenere, J. (2008). Impact of screen size on performance, awareness, and user satisfaction with adaptive graphical user interfaces. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems.* CHI '08. ACM Press, 1247-1256. (AR: 157/714 = 22%) (IBM/NSERC/UBC)

C21. **Findlater, L.**, McGrenere, J., and Modjeska, D. (2008). Evaluation of a role-based approach for customizing a complex development environment. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. CHI '08. ACM Press, 1267-1270. (Conference notes acceptance rate: 61/340 = 18%) (IBM/NSERC)

C20. **Allen, M.**, McGrenere, J., and Purves, B. (2007). PhotoTalk: The design and evaluation of a digital image based communication tool for people who have aphasia. In *Proceedings of the 9th International ACM SIGACCESS Conference on Computers and Accessibility*. Assets '07. ACM Press, 187-194. (AR: 27/86 = 31%) (NSERC)

C19. **Moffatt, K.**, and McGrenere, J. (2007). Slipping and drifting: Using older users to uncover pen-based target acquisition difficulties. In *Proceedings of the 9th International ACM SIGACCESS Conference on Computers and Accessibility*. Assets '07. ACM Press, 11-18. ***Best student paper award.*** (AR: 27/86 = 31%) (NSERC/CIHR)

C18. **Findlater, L.**, and McGrenere, J. (2007). Evaluating reduced-functionality interfaces according to feature findability and awareness. In *Proceedings of the 11th IFIP International Conference on Human Computer Interaction*. INTERACT 2007. International Federation for Information Processing, 592-605. (AR: 75/223 = 33%) (IBM/NSERC)

C17. **Bunt, A.**, McGrenere, J., and Conati, C. (2007). Understanding the Utility of Rationale in a Mixed-Initiative System for GUI Customization. *Proceedings of the 11th International Conference on User Modeling*. UM 2007. Springer, 147-156. (AR: 30/153 = 20%) (IBM/NSERC/PRECARN/UBC)

C16. **Gluck, J.**, **Bunt, A.**, and McGrenere, J. (2007). Matching attentional draw with utility in interruption. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. CHI '07. ACM Press, 41-50. (AR: 142/571 = 25%) (NSERC).

C15. **Bunt, A.**, Conati, C., and McGrenere, J. (2007). Supporting interface tailoring using a mixed-initiative approach. In *Proceedings of the 12th International Conference on Intelligent User Interfaces*. IUI '07. ACM Press, 92-101. ***Best paper award*.** (AR: 26/118 = 22%) (IBM/NSERC/UBC)

C14. **Nekrasovski, D., Bodnar, A.**, McGrenere, J., Guimbretiere, F., and Munzner, T. (2006). An evaluation of pan&zoom and rubber sheet navigation with and without an overview. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. CHI '06. ACM Press, 11-20. (AR: 118/508 = 23%) (NSERC)

C13. **Zheng, Q.**, Booth, K.S., and McGrenere, J. (2006). Co-authoring with structured annotations. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. CHI '06. ACM Press, 131-140. (AR: 118/508 = 23%) (NSERC)

C12. **Tee, K., Moffatt, K., Findlater, L., Macgregor, E.**, McGrenere, J., Purves, B., and Fels, S. (2005). A visual recipe book for persons with language impairments. In *Proceedings of the SIGCHI Conf. on Human Factors in Comp. Sys.*. CHI '05. ACM Press, 501-510. (AR: 93/372 = 25%) (UBC)

C11. **Chan, A.**, Maclean, K., and McGrenere, J. (2005). Learning and identifying haptic icons under workload. In Proceedings of the First Joint Eurohaptics Conference and Symposium on Haptic Interfaces for Virtual Environment and Teleoperator Systems. WHC 2005, IEEE-VR2005. WHC. IEEE Computer Society, 432-439. (AR approximately 40%) (NSERC).

Lightly refereed contributions – book chapters [CHnn]

CH3. McGrenere, J. , Li, J., Lo, J., and Litani, E. (2010). Designing effective notifications for collaborative development environments. In M. Chignell, J. Cordy, J. Ng, and Y. Yesha (Eds.), *The Smart Internet: Current Research and Future Applications* (pp. 65-87). Springer. (IBM)

CH2. McGrenere, J., **Bunt, A., Findlater, L., and Moffatt K.** Generalization in human-computer interaction research. In M. Banich and D. Caccamise (Eds.), *Generalization of Knowledge: Multidisciplinary Perspectives* (pp. 277-295). Taylor & Francis.

CH1. McGrenere, J., Sullivan, J., and Baecker, R. (2006). Designing technology for people with cognitive impairments. CHI Workshop. In *CHI '06 Extended Abstracts on Human Factors in Computing Systems*. CHI '06. ACM Press, 1635-1638. (Workshop AR: 26/36 = 72%) (UBC/NSERC)

***Selected* other lightly-refereed contributions – abstracts and workshops [Lnn]**

L13. **Leung, R.**, McGrenere, J., and Graf, P. (2010). Improving learnability: Lowering barriers to technology adoption. Workshop position paper presented at "Senior-friendly technologies: Interaction design for the elderly," *SIGCHI Conference on Human Factors in Computing Systems*. CHI '10. (4 pages) (NSERC)

L12. Jacova, C., Lee H.S., Le Huray, S., McGrenere, J., Beattie, B.L., Feldman, H., and Hsiung G-Y.R. (2010). Cognitive Testing on Computer (C-TOC): Designing a computerized test battery for evaluation of cognitive impairment with user and community health professional input. Poster presentation and abstract, *Alzheimer's Association International Conference on Alzheimer's Disease 2010*. ICAD 2010. (CIHR)

L11. **Bunt, A.**, Conati, C., and McGrenere, J. (2008). Insights from the design and evaluation of a mixed-initiative personalization facility. Workshop position paper presented at "Usable AI," *SIGCHI Conference on Human Factors in Computing Systems*. CHI '08. (4 pages) (NSERC)

3. Other Recent Evidence of Impact and Contributions (2005 – 2011)

Awards:
Peter Wall Institute for Advanced Studies, UBC, Early Career Scholar Award, 2010
ACM Conference on Human Factors in Computing Systems 2009, ***best paper award*** [C24]
ACM SIGACCESS Conference on Computers and Accessibility 2007, ***best student paper award*** [C19]
ACM Conference on Intelligent User Interfaces 2007, ***best paper award*** [C15]
IBM Faculty Award, 2004, 2005, 2006, 2009
Anita Borg Early Career Scholar Award, 2004

Recent Invited Lectures: Nokia, Vancouver (2009), IBM CAS / NSERC Strategic Workshop in Smart Internet Technologies (2009), IBM University Days (2009) TorCHI, Toronto local chapter of SIGCHI, University of Toronto (2009) Queen's University, Dept of Computer Science (2009), University of Waterloo, Department of Computer Science (2009); IBM Pacific Development Centre (2007); University of Colorado at Boulder (2006); Sauder Business School, UBC (2006).

Editorial Boards: ACM TACCESS (2011)

Conference Program and Organizing Committees: Student Research Competition Co-Chair: ACM CHI 2010, 09; Associate Chair: ACM CHI 2011, 09, 07, ACM UIST 2004; Program Committees: ACM ASSETS 2008, ACM IUI 2008, Graphics Interface 2009, 04, 03; Posters Co-Chair, ACM UIST 2004; Conference Organization, ACM UIST 2003.

Consulting/Contract Activities: IBM Visiting Scientist (2003-10)

Scholarly Publication Reviewing: ACM CHI (2010, 06, 04, 03, 02, 00); ACM UIST (2011, 10, 06, 03, 99); ACM CSCW (2011); ACM ToCHI (2010, 09); Interacting with Computers (2010); International Journal of Human Computer Studies (2009, 08, 07); Graphics Interface (2007, 06, 02); Universal Access in the Information Society (2006), International Conference on Information Systems (2004); ACM SIGGRAPH (2000); 8th International World Wide Web Conference (1999)

4. Delays in Research Activity

Two six-month parental leaves (2004/05, 2007/08) have impacted my research. Beyond the loss of 12 months of productivity, the continued shared parental care for my two young children limits my work in many ways, including my ability to travel for research, which has been significantly curtailed.

5. Contributions to the Training of Highly Qualified Personnel

Mentoring graduate students is a passion for me. I continue to assume a large supervision load relative to those in my department or in HCI: currently I have 1 PostDoc, 2 PhD, and 6 MSc, plus undergraduate interns. I hold a series of weekly mentoring meetings, including a one-hour one-on-one meeting with most of my students. The caliber of the training they receive is reflected in their success after leaving UBC. My first 3 PhD students all landed tenure-track faculty positions: Bunt (2007) at U. Manitoba; Findlater (2009) at U. Maryland, College Park; Moffatt (2010) at U. McGill. My 4th PhD student, Leung, recently defended and is now the Manager, Academic Research Center (ARC), North America, at SAP. Findlater and Moffatt were awarded NSERC PDFs upon graduation. I have also graduated 15 MSc students since starting my faculty position in 2002, all of whom have found work immediately in the high-tech industry or continued with me to do a PhD. Places of employment include organizations such as Microsoft, SAP, Open Text, HSBC, ESRI Canada, and the government. Approximately 50% of my graduate students were (or are) co-supervised. In every case but one (Hazelton), I have played an equal or a greater role in their supervision than the other co-supervisor(s). In general, I spend almost as much time with my co-supervised students as I do with my sole-supervised students.

Natural Sciences and Engineering Research Council of Canada | Conseil de recherches en sciences naturelles et en génie du Canada

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: 2011/10/23

Family name	Given name	Initial(s) of all given names	Personal identification no. (PIN)
McGrenere	Joanna	JL	166692

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

201 - 2366 Main Mall
Dept of Computer Science, UBC
Vancouver BC V6T1Z4
CANADA

If address is temporary, indicate:

Starting date: 2015/09/01

Leaving date: 2016/08/31

Telephone number	Facsimile number	E-mail address
(604) 827-5201	(604) 822-4231	joanna@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): [ ] Male [X] Female

LANGUAGE CAPABILITY

English	Read [X]	Write [X]	Speak [X]
French	Read [X]	Write [X]	Speak [X]

I wish to receive my correspondence: in English [X] in French [ ]

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).

human-computer interaction, interface design, universal usability, assistive technology, adaptive/adaptable interfaces, personalization/customization, computer-supported cooperative work, collaboration technology, user studies, qualitative and quantitative evaluation

Research subject code(s)

Primary: 2700

Secondary: 2710

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
Consent Received from Marie Roy				
Roy, Marie	Undergraduate (Completed)	Supervised 1994 - 1997	Isotope geochemistry in petroleum engineering	V-P (Research), Earth Analytics Inc., Calgary, Alberta
Consent Not Obtained 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 McGrenere, Joanna JL

Department	Postsecondary Institution
Computer Science	British Columbia

I hereby allow the above-named applicant to include limited personal data about me in grant applications submitted for consideration to NSERC for the next six years. This limited data will only include my name, type of HQP training and status, years supervised or co-supervised, title of the project or thesis and, to the best of the applicant's knowledge, my position title and company or organization at the time the application is submitted. I understand that NSERC will protect this data in accordance with the *Privacy Act*, and that it will only be used in processes that assess the applicant's contributions to the training of highly qualified personnel (HQP), including confidential peer review.

Trainee's signature _____ Date _____

Note: This form must be retained by the applicant and made available to NSERC upon request.