



# CARMAN NEUSTAEDTER, PHD

E-mail: [carmster@gmail.com](mailto:carmster@gmail.com)  
Web: [www.carmster.com](http://www.carmster.com)  
Citizenship: Canadian

---

## Professional Interests

I am interested in performing research and teaching in the broad area of Human-Computer Interaction. I enjoy pursuing novel ideas by studying people through qualitative and quantitative means to prototype design ideas that will enhance and extend people's existing routines. I also seek to disseminate this knowledge through publications and presentations.

---

## Education

- |                                  |  |
|----------------------------------|--|
| September 2003<br>- January 2007 | <b>PhD Computer Science</b> , University of Calgary, Canada<br>Specialization: Human-Computer Interaction<br>Thesis Topic: Domestic Awareness and the Role of Family Calendars<br>Supervisor: Dr. Saul Greenberg |
| September 2001<br>- May 2003     | <b>MSc Computer Science</b> , University of Calgary, Canada<br>Specialization: Human-Computer Interaction<br>Thesis Topic: Privacy in Home Video Conferencing<br>Supervisor: Dr. Saul Greenberg                  |
| September 1997<br>- June 2001    | <b>BSc Computer Science</b> , University of Calgary, Canada<br>Minor: Political Science  |

---

## Research Experience

- |                               |   |
|-------------------------------|---|
| July 2007<br>- Present        | <b>Research Scientist</b> , Kodak Research Labs, Rochester, NY<br>Managers: Rodney Miller, Dr. Nancy Ferris, Dr. Henry Kautz<br>Studying social culture, prototyping and evaluating technology. |
| August 2005<br>- April 2006   | <b>Research Contractor</b> , Microsoft Research, Redmond, WA<br>Manager: Dr. A.J. Bernheim Brush<br>Design and deployment of a distributed digital family calendar.                             |
| May 2005<br>- August 2005     | <b>Research Intern</b> , Microsoft Research, Redmond, WA<br>Manager: Dr. A.J. Bernheim Brush<br>Participatory design and evaluation of a digital family calendar.                               |
| May 2004<br>- August 2004     | <b>Research Intern</b> , Microsoft Research, Redmond, WA<br>Manager: Dr. Marc A. Smith<br>Design and evaluation of email management software.   |
| June 2003<br>- September 2003 | <b>Research Intern</b> , Microsoft Research, Redmond, WA<br>Manager: Dr. Marc A. Smith<br>Design and evaluation of conversation browsing software.  |

## Research Experience Cont'd

---

July 2002  
- September 2002

**Research Intern**, Microsoft Research, Redmond, WA  
Manager: Dr. Eric Horvitz  
Mentor: Gina Venolia  
Design and evaluation of a conversation visualization for email.

## Teaching Experience

---

September 2008  
- Present

**Adjunct Professor**, Dept. of Computer Science, University of Rochester, NY  
Department Chair: Dr. Henry Kautz  
Teaching an introductory course in human-computer interaction.

September 1999  
- April 2004

**Teaching Assistant**, Dept of Computer Science, University of Calgary  
Teaching tutorials and labs, material preparation, and marking.

### Intro to Human-Computer Interaction

Task-centred system design, usability studies, information visualization.  
Course Instructors: Dr. Sheelagh Carpendale, James Tam

### Networking and Computer Communications

Communications and networking including the OSI model and TCP/IP model.  
Course Instructor: Ivo Jirasek

### Foundations of Software Engineering

Introduction to software development processes.  
Course Instructors: Dr. Jorg Denzinger, Dr. Marina Gavrilova

### Information Structures

Algorithm design and data structures, space and time complexity.  
Course Instructors: Dr. Jeffrey Boyd, Dr. Marina Gavrilova

### Introduction to Computers

Personal computer software and hardware.  
Course Instructor: Dr. Marina Gavrilova

July 1999  
- August 2001

**Instructor**, Faculty of Continuing Education, University of Calgary  
Summer classes for high school students: lesson planning / teaching of programming and web design.

## Relevant Professional Experience

---

August 1999  
- August 2001

**Network Systems Administrator**, Davar Child Care Society, Calgary  
Supervisor: Susan Elson  
System maintenance and installation, network design and implementation of TCP/IP LAN, database and file system management

## Publications: Book Chapters

---

[B2] Greenberg, S., **Neustaedter, C.**, and Elliot, K. (2008)  
Awareness in the Home: The Nuances of Relationships, Domestic Coordination and Communication,  
Book Chapter in P. Markopoulos, B. De Ruyter, W. Mackay (ed.), Awareness Systems: Advances in  
Theory, Methodology and Design, Kluwer Academic Publishers, pp 1—21.

---

**Publications: Book Chapters Cont'd**

---

[B1] Boyle, M., **Neustaedter, C.** and Greenberg, S. (2008)  
Privacy Factors in Video-based Media Spaces. In *Media Space: 20+ Years of Mediated Life*. (S. Harrison, Ed.), Springer, 32 pages.

---

**Publications: Journal Articles (fully refereed)**

---

[J2] **Neustaedter, C.**, Brush, A.J., and Greenberg, S., (2008)  
"The Calendar is Crucial": Coordination and Awareness through the Family Calendar, In *ACM Transactions on Computer-Human Interaction (ToCHI)*, ACM Press.

[J1] **Neustaedter, C.**, Greenberg, S., and Boyle, M., (2006)  
Blur Filtration Fails to Preserve Privacy for Home-Based Video Conferencing, In *ACM Transactions on Computer Human Interactions (ToCHI)*, March 2006.

---

**Publications: Conference Papers (fully refereed)**

---

[C18] **Neustaedter, C.**, and Fedorovskaya, E. (2009 – in submission)  
Improving the Flow in Digital Photo Ecosystems through Sketching and Wizard of Oz Techniques, In *Submission to the ACM Conference on Computer-Human Interaction (2009)*, ACM Press.

[C17] **Neustaedter, C.**, and Fedorovskaya, E. (2009 – in submission)  
Presenting Identity in the Virtual World through Avatar Appearances, In *Submission to the ACM Conference on Computer-Human Interaction (2009)*, ACM Press.

[C16] **Neustaedter, C.**, and Fedorovskaya, E. (2009 – in submission)  
Establishing and Maintaining Relationships in a Social Virtual World, In *Submission to the ACM Conference on Computer-Human Interaction (2009)*, ACM Press.

[C15] **Neustaedter, C.**, and Fedorovskaya, E. (2009 – in submission)  
Capturing and Sharing Memories in a Virtual World, In *Submission to the ACM Conference on Computer-Human Interaction (2009)*, ACM Press.

[C14] Gallagher, A., **Neustaedter, C.**, Cao, L., Luo, J., and Chen, T. (2008)  
Image Annotation using Personal Calendars as Context, *Proceedings of the ACM Multimedia Conference (MM 2008)*, ACM Press.

[C13] Fedorovskaya, E., **Neustaedter, C.**, and Hao, W. (2008)  
Image Harmony for Consumer Images, *Proceedings of the IEEE International Conference on Image Processing (ICIP 2008)*, IEEE.

[C12] Nunes, M., Greenberg, S. and **Neustaedter, C.** (2008)  
Sharing Digital Photographs in the Home through Physical Mementos, Souvenirs, and Keepsakes. *Proceedings of the Conference on Designing Interactive Systems (DIS 2008)*, ACM Press, Cape Town, South Africa.

[C11] **Neustaedter, C.**, Brush, A.J., and Greenberg, S., (2007)  
A Digital Family Calendar in the Home: Lessons from Field Trials of LINC, *Proceedings of Graphics Interface 2007 (GI 2007)*, May 28-30, Montreal, Quebec, Canada.

[C10] Elliot, K., Watson, M., **Neustaedter, C.** and Greenberg, S. (2007)  
Location-Dependent Information Appliances for the Home. *Proceedings of Graphics Interface 2007 (GI 2007)*, May 28-30, Montreal, Quebec, Canada.

**Publications: Conference Papers (fully refereed) Cont'd**

---

[C9] Elliot, K., **Neustaedter, C.** and Greenberg, S., (2007)  
StickySpots: Using Location to Embed Technology in the Social Practices of the Home, In *Proceedings of the 1st International Conference on Tangible and Embedded Interaction (TEI 2007)* Feb 15-17, Baton Rouge, Louisiana, USA.

[C8] **Neustaedter, C.**, Elliot, K., and Greenberg, S., (2006)  
Interpersonal Awareness in the Domestic Realm, In *Proceedings of the Australian Conference on Computer-Human Interaction (OzCHI 2006)*.  
*Acceptance rate 51%*

[C7] **Neustaedter, C.**, and Brush, A.J., (2006)  
"LINC-ing" the Family: The Participatory Design of an Inkable Family Calendar, In *Proceedings of the ACM Conference on Computer-Human Interaction (CHI 2006)*, April 24-27, Montreal, Quebec, ACM Press, pp. 141-150.  
*Best paper nominee (fewer than 5% of papers selected)*

[C6] Tang, A., **Neustaedter, C.**, and Greenberg, S., (2006)  
Embodiments in Mixed Presence Groupware, In *Proceedings of the 20th British HCI Group Annual Conference (HCI 2006)*, Sept. 11-15, Queen Mary, University of London.  
*Acceptance rate 25%*

[C5] Elliot, K., **Neustaedter, C.**, and Greenberg, S., (2005)  
Time, Ownership and Awareness: The Value of Contextual Locations in the Home, In *Proceedings of the Seventh International Conference on Ubiquitous Computing (UbiComp 2005)*, Springer-Verlag.  
*Acceptance rate 9.6%*

[C4] **Neustaedter, C.**, Brush, A.J., Smith, M., and Fisher, D., (2005)  
The Social Network and Relationship Finder: Social Sorting for Email Triage, In *Proceedings of the Conference on Email and Anti-Spam (CEAS 05)*, Stanford University.  
*Acceptance rate 37.7%*

[C3] **Neustaedter, C.**, Brush, A.J., and Smith, M., (2005)  
Beyond "From" and "Received": Exploring the Dynamics of Email Triage, In *Extended Abstracts of the Proceedings of the Conference on Computer-Human Interaction (CHI 2005)*, ACM Press.  
*Acceptance rate < 25%*

[C2] **Neustaedter, C.** and Greenberg, S. (2003)  
The Design of a Context-Aware Home Media Space for Balancing Privacy and Awareness, In *Proceedings of the Fifth International Conference on Ubiquitous Computing (UbiComp 2003)*.  
*Acceptance rate < 15%*

[C1] Venolia, G., **Neustaedter, C.** (2002)  
Understanding Sequence and Reply Relationships within Email Conversations: A Mixed-Model Visualization, In *Proceedings of the ACM Conference on Computer-Human Interaction (CHI 2003)*, ACM Press.  
*Acceptance rate 16%*

**Publications: Videos (fully refereed)**

---

[V6] Elliot, K., Watson, M., **Neustaedter, C.** and Greenberg, S. (2007)  
Location-Dependent Domestic Information Appliances, In *Video Proceedings of the Fifth International Conference on Pervasive Computing 2007 (Pervasive 2007)*, May 13-16, Toronto, Ontario, Canada.

## Publications: Videos (fully refereed) Cont'd

---

[V5] Elliot, K., **Neustaedter, C.**, and Greenberg, S., (2006)  
Sticky Spots: A Location-Based Message System for the Home, In *Video Proceedings of the ACM Conference on Computer Supported Cooperative Work (CSCW 2006)*.

[V4] **Neustaedter, C.**, Brush, A.J., and Greenberg, S., (2006)  
LINC, An Inkable Digital Family Calendar: The Video, In *Video Proceedings of the ACM Conference on Computer Supported Cooperative Work (CSCW 2006)*.

[V3] Tang, A., **Neustaedter, C.**, and Greenberg, S., (2004)  
VideoArms: Supporting Remote Embodiment in Groupware, In *Video Proceedings of the ACM Conference on Computer-Supported Cooperative Work (CSCW 2004)*.

[V2] **Neustaedter, C.** and Greenberg, S. (2003)  
The Design of a Context-Aware Home Media Space, In *Video Proceedings of the Fifth International Conference on Ubiquitous Computing (UbiComp 2003)*.

[V1] **Neustaedter, C.**, Greenberg, S. and Carpendale, S. (2002)  
IMVis: Instant Messenger Visualization, In *Video Proceedings of the ACM Conference on Computer Supported Cooperative Work (CSCW 2002)*.

## Publications: Demonstrations

---

[D2] **Neustaedter, C.**, Brush, A.J., and Greenberg, S., (2006)  
A Demo of Family Calendaring using LINC, *Extended Abstract and Demonstration at the ACM Conference on Computer Supported Cooperative Work (CSCW 2006)*.

[D1] Brush, A.J., and **Neustaedter, C.**, (2006)  
LINC: A Ubiquitous Digital Family Calendar, *Extended Abstract and Demonstration at the Eighth International Conference on Ubiquitous Computing (UbiComp 2006)*.

## Publications: Theses

---

[T2] **Neustaedter, C.** (2007)  
Domestic Awareness and the Role of Family Calendars, PhD Dissertation, *Department of Computer Science, Calgary, Alberta, Canada*.

[T1] **Neustaedter, C.** (2003)  
Balancing Privacy and Awareness in Home Media Spaces, MSc Thesis, Department of Computer Science, Calgary, Alberta, Canada.

## Publications: Workshop Papers

---

[W6] **Neustaedter, C.**, (2008)  
Reflecting on Domestic Displays for Photo Viewing and Sharing, In *ACM CHI 2008 Workshop on Collocated Social Practices Surrounding Photos*. Organized by Sian Lindley, Abigail Durrant, Dave Kirk, and Alex Taylor.

[W5] Tang, A., and **Neustaedter, C.**, (2006)  
Visualizing Egocentric Relationships in Instant Messaging, In *ACM CHI 2006 Workshop on Social Visualization, Exploring Text, Audio and Video Interactions*. Organized by Karahalios, K., and Viegas, F.

[W4] **Neustaedter, C.**, Elliot, K., and Greenberg, S., (2005)  
Understanding Interpersonal Awareness in the Home, In *ACM CHI 2005 Workshop on Awareness Systems*.

## Publications: Workshop Papers Cont'd

---

[W3] **Neustaedter, C.** and Greenberg, S. (2003)  
Balancing Privacy and Awareness in Home Media Spaces, In *Workshop on Ubicomp Communities: Privacy as Boundary Negotiation, UbiComp 2003*.

[W2] Venolia, G., **Neustaedter, C.** (2002)  
Understanding Sequence and Reply Relationships within Email Conversations: A Mixed-Model Visualization, In *ACM CSCW 2002 Workshop on Redesigning Email for the 21st Century*.

[W1] **Neustaedter, C.** & Greenberg, S. (2002)  
Supporting Coherence with a 3D Instant Messenger Visualization, In *ACM CHI 2002 Workshop on Discourse Architectures*.

## Patent Applications Pending

---

[P4] **Configuring a Virtual World User Interface, 2008**  
Carman Neustaedter, Kevin Gobeyn, and Elena Fedorovskaya (Kodak Research Labs)

[P3] **Ordering Personal Information with Social Meta-data, 2006**  
Danyel Fisher, A.J. Brush, Andrew Jacobs, Marc Smith, Carman Neustaedter (Microsoft Research)  
MSFTP1304US

[P2] **Mobile Access to Information Using Images, 2006**  
A.J. Brush and Carman Neustaedter (Microsoft Research)  
U.S. Serial No. 60/756,914

[P1] **User Interface for an Inkable Family Calendar, 2006**  
A.J. Brush and Carman Neustaedter (Microsoft Research)  
U.S. Serial No. 60/756,775

## Presentations and Talks

---

- |               |  |
|---------------|--|
| January 2008  | <b>Designing Technology for Everyday Life</b><br>Rochester Institute of Technology (RIT), Usability Engineering Course, <i>Invited Guest Lecture</i> . |
| December 2007 | <b>Designing Technology for Everyday Life</b><br>Human Factors and Ergonomics Society of Western NY, <i>Invited Talk</i> .                             |
| October 2007  | <b>Designing Technology for Everyday Life</b><br>University of Rochester, Department of Computer Science Colloquium, <i>Invited Talk</i> .             |
| May 2007      | <b>Field Trials of a Digital Family Calendar</b><br>ACM Conference on Graphics and Interfaces (2007), <i>Conference Session Talk</i> .                 |
| November 2006 | <b>Interpersonal Awareness in the Domestic Realm</b><br>Australian Conference on Computer Human Interaction (2006), <i>Conference Session Talk</i> .   |
| April 2006    | <b>LINCing the Family: An Inkable Family Calendar</b><br>ACM Conference on Computer Human Interaction (2006), <i>Conference Session Talk</i> .         |

## Presentations and Talks Cont'd

---

- March 2006      **User-Centred Design for the Home**  
*Microsoft Research Invited Talk.*
- July 2005        **The Social Network and Relationship Finder**  
Conference on Email and Anti-Spam (CEAS 05), *Conference Session Talk.*
- April 2005      **Exploring Email Triage**  
ACM Conference on Computer Human Interaction (CHI 2005), *Conference Session Short Talk.*
- April 2005      **Interpersonal Awareness in the Home**  
ACM Conference on Computer Human Interaction (CHI 2005), *Workshop on Awareness Systems.*
- January 2005    **Interpersonal Awareness**  
University of Calgary, Dept. Computer Science, *Graduate Student Seminar Series.*
- October 2003    **A Context-Aware Home Media Space**  
Fifth International Conference on Ubiquitous Computing (UbiComp 2003), *Conference Session Talk.*
- October 2003    **Balancing Privacy and Awareness in a Home Media Space**  
Fifth International Conference on Ubiquitous Computing (UbiComp 2003), *Workshop on Ubicomp Communities: Privacy as Boundary Negotiation.*
- November 2002   **Email Conversation Visualization**  
ACM Conference on Computer Supported Cooperative Work (CSCW 2002), *Workshop on Redesigning Email for the 21st Century.*
- April 2002      **Supporting Coherence with an Instant Messenger Visualization**  
ACM Conference on Computer Human Interaction (CHI 2002), *Workshop on Discourse Architectures.*

## Selected Awards and Scholarships

---

- 2005            **Alberta Ingenuity Scholarship** for research and course excellence.  
Valued at \$22,000 CND per annum (without other major scholarship) plus \$1500 CND per annum research allowance, for a duration of five years.
- 2004            **NSERC PGS-D Scholarship** for research and course excellence.  
Natural Sciences and Engineering Research Council, Canada  
Valued at \$21,000 CND per annum for a duration of two years.
- 2004            **ICORE Graduate Student Scholarship** for research and course excellence.  
Informatics Circle of Research Excellence, Canada  
Valued at \$15,000 CND per annum for a duration of two years.
- 2005            **Graduate Students' Association Distinction Award** for community service.  
University of Calgary  
Valued at \$1000 CND.

## Selected Awards and Scholarships Cont'd

---

- |      |  |
|------|--|
| 2004 | <b>Dean's Research Excellence Award</b> for research potential and excellence.<br>University of Calgary<br>Valued at \$3000 CND.   |
| 2003 | <b>TRLabs Research Scholarship</b> for research excellence.<br>Telecommunication Research Labs, Calgary, Canada<br>Valued at \$12,000 CND per annum for a duration of 2 years. |
| 2003 | <b>Dean's Entry Award</b> for research potential.<br>University of Calgary<br>Valued at \$6000 CND.  |

## Professional Activities

---

- |            |   |
|------------|---|
| 2009       | ACM Conference on Computer-Human Interaction, Program Committee                                 |
| 2008       | ACM CSCW Workshop on Designing for Families, Co-Organizer with A.J. Brush and David W. McDonald |
| 2008       | ACM Conference on Computer Supported Cooperative Work, Reviewer                                 |
| 2008       | ACM Conference on Designing Interactive Systems, Program Committee                              |
| 2007       | ACM Journal of Transactions on Information Systems, Reviewer                                    |
| 2004-2008  | ACM Conference on Computer-Human Interaction, Reviewer  |
| 2007       | The International Conference on Pervasive Computing, Reviewer                                   |
| 2004-2006  | The International Conference on Ubiquitous Computing, Reviewer                                  |
| 2004, 2006 | ACM Conference on Computer Supported Cooperative Work, Reviewer                                 |
| 2004-2005  | ACM Journal of Transactions on Computer-Human Interaction, Reviewer                             |
| 2005       | Journal of HCI, Special Issue on Awareness Systems, Reviewer                                    |
| 2005       | IEEE Workshop on Horizontal Interactive Human-Computer Systems, Reviewer                        |
| 2005       | The International Conference on Pervasive Computing, Reviewer                                   |
| 2005       | ACM Symposium on User Interface Software & Technology, Reviewer                                 |
| 2004-2005  | Journal of Computer Supported Cooperative Work, Reviewer  |

## Organizational Memberships

---

- |                                   |   |
|-----------------------------------|---|
| July 2008<br>- Present            | <b>Special Interest Group on Computer-Human Interaction (SIGCHI)</b><br>Association for Computing Machinery (ACM) |
| July 2007<br>- Present            | <b>Association for Computing Machinery (ACM)</b>  |
| May 2004<br>- April 2005          | <b>Computer Science Graduate Society</b> , President<br>University of Calgary                                     |
| June 2003<br>- April 2004         | <b>Computer Science Graduate Society</b> , VP Academic<br>University of Calgary                                   |
| September 2003<br>- April 2004    | <b>Graduate Students' Association</b> , Academic Standing Committee<br>University of Calgary                      |
| September 2002<br>- December 2002 | <b>Campus Recreation, Intramural Soccer</b><br>University of Calgary  |

## Organizational Memberships Cont'd

---

September 2002 - April 2005	<b>Graduate Student's Association Intramural Volleyball</b> University of Calgary
September 1997 - September 1998	<b>Residence Computing Support</b> University of Calgary

## Skills and Hobbies

---

*Research:* Leadership, independent or team work, public speaking, usability studies, controlled experiments, field studies, interviewing, surveys, contextual inquiry, qualitative and quantitative data analysis, prototyping (low, medium, and high-fidelity), interaction design

*Technical:* Computer vision, software development in C#, C/C++, Java, SQL Server, ASP.NET, Perl, Visual Basic, HTML

*Languages:* English (native speaker), French (basic proficiency)

*Fun Stuff:* Volleyball, karate, hockey, photography, team puzzle-solving challenges

## References

---

Dr. Saul Greenberg, Professor  
University of Calgary  
2500 University Drive NW  
Calgary, Alberta, Canada  
Phone: +1 403-220-6087  
saul.greenberg@ucalgary.ca

Dr. A.J. Brush, Researcher  
Microsoft Research  
One Microsoft Way  
Redmond, WA, USA  
Phone: +1 425-722-7299  
ajbrush@microsoft.com

James Tam, Instructor  
University of Calgary  
2500 University Drive NW  
Calgary, Alberta, Canada  
Phone: +1 403-210-9455  
tamj@cpsc.ucalgary.ca