

ANTHONY TANG

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Education

University of British Columbia, Vancouver BC

Ph.D. Candidate, Specialization: Human-Computer Interaction (gpa: 4.33).

Supervised by Dr. Sid Fels, expected completion: December, 2009.

University of Calgary, Calgary AB

M.Sc., Specialization: Human-Computer Interaction (gpa: 4.0). Supervised by Dr.

Saul Greenberg, January, 2005.

Simon Fraser University, Burnaby BC

B.Sc., Double Major: Computing Science & Psychology (gpa: 3.82), August, 2002.

Sir Winston Churchill, Vancouver BC

International Baccalaureate Diploma, June, 1997.

Research Interests

Human-Computer Interaction, User Interface Design, Computer Supported Cooperative Work, Novel Interaction Techniques and Input Devices, Collaboration, Information Visualization

Awards and Distinctions

NSERC Post-Doc Fellowship

2010-2012 (pending)

Pacific Century Graduate Scholarship

2007-2009

NSERC Post-Graduate Scholarship D

2005-2007

NSERC Post-Graduate Scholarship A

2002-2004

iCore Post-Graduate Scholarship

2002-2004

Dean's Excellence in Research Award, University of Calgary

2002

C. D. Nelson Memorial Graduate Scholarship, Simon Fraser University

2002 (declined)

University Honour Roll, Simon Fraser University

2001 (Spring), 2000 (Fall)

Applied Science Dean's Honour Roll, Simon Fraser University

1997-2001 (All semesters inclusive)

Open Undergraduate Scholarship, Simon Fraser University

2000 (Spring, Summer, Fall), 1998 (Summer)

Publication Summary

Journal articles

Miyaoku, K., Tang, A., and Fels, S. (2007). C-Band: A Ring Tag System Using a Color Pattern Code. *Information Processing Society of Japan Journal*, Vol. 48, No. 3, March, pp: 1361-1371.

Jeffrey, P., Blackstock, M., Finke, M., Tang, A., Lea R., Deutscher, M., Miyaoku, K. (2007). Chasing the Fugitive on Campus: Designing a Location-based Game for Collaborative Play. *Loading...*, Vol 1, No. 1.

Tang, A., Boyle, M. and Greenberg, S. (2005). Understanding and Mitigating Display and Presence Disparity in Mixed Presence Groupware. *Journal of Research and Practice in Technology*, Volume 37, No. 2, pp: 71-88. (Invited paper.)

Refereed conference papers

Tang, A., Pahud, M., Inkpen, K. M., Benko, H., Tang, J. C., and Buxton, W. (in press). *Three's Company: Understanding Communication Channels in Three-way Distributed Collaboration*. To Appear in Proceedings of the ACM Conference on Computer Supported Cooperative Work (CSCW 2010). (February 6 – 10, 2010, Savannah, USA).

Wong, N., Tang, A., Livingston, I., Gutwin, C., and Mandryk R. (in press). *Character Sharing in World of Warcraft*. To Appear in Proceedings of the European conference on Computer Supported Cooperative Work (ESCW 2009). (September 7-11, 2009, Vienna, Austria).

Tang, A., Lanir, J., Greenberg, S., and Fels, S. (2009). *Supporting Transitions in Work: Informing Large Display Application Design by Understanding Whiteboard Use*. In Proceedings of GROUP 2009. (May 10-13, 2009, Sanibel Island, USA). ACM Press. pp: 149-158. (Acceptance: 40/110 – 36%)

Finke, M., Tang, A., Leung, R., and Blackstock, M. (2008). *Lessons Learned: Game Design for Large Public Displays*. In Proceedings of the 3rd international Conference on Digital Interactive Media in Entertainment and Arts (DIMEA 2008). (September 10-12, Athens, Greece). ACM Press. pp: 26-33. (Acceptance: 59-77 - 77%)

Isenberg, P., Tang, A., and Carpendale, M. S. T. (2008). *Exploratory Study of Visual Information Analysis*. In Proceedings of the SIGCHI conference on Human factors in computing systems (CHI 2008). (April 5-10, Florence, Italy). ACM Press. pp: 1217-1226. (Acceptance: 157/714 - 22%)

Lanir, J., Booth, K. S., and Tang, A. (2008). *MultiPresenter: A Presentation System for (Very) Large Display Spaces*. In Proceedings of the 16th international Conference on Multimedia (MULTIMEDIA 2008). (October 27- November 1, Vancouver, Canada). ACM Press. pp: 149-158. (Acceptance: 56/280 - 20%)

Tang, A., Finke, M., Blackstock, M., Leung, R., Deutscher, M., and Lea, R. (2008). *Designing for Bystanders: Reflections on Building a Public Digital Forum*. In Proceedings of the SIGCHI conference on Human factors in computing systems (CHI 2008). (April 5-10, Florence, Italy). ACM Press. pp: 879-882. (Acceptance: 61/340 - 18%)

Tang, A., Greenberg, S., and Fels, S. (2008). *Exploring Video Streams using Slit-Tear Visualizations*. In Proceedings of the working conference on Advanced Visual Interfaces (AVI 2008). (May 28-30, Napoli, Italy). ACM Press. pp: 191-198. (Acceptance: 32/117 - 27%)

Miyaoku, K., Tang, A., and Fels, S. (2007). *C-Band: A Flexible Ring Tag System for Camera-Based User Interface*. In Proceedings of HCI International 2007 (HCII 2007). (July 22-27, Beijing, China). Springer LNCS 4563. pp: 320-328.

Shoemaker, G., Tang, A., and Booth, K. S. (2007). *Shadow Reaching: A New Perspective on Interaction for Large Wall Displays*. In Proceedings of the 20th ACM Symposium on User Interface Software Technology (UIST 2007). (October 7-10, Newport, RI, USA), pp: 53-56. ACM Press. (Acceptance: 9/66 – 14%).

Fels, S., Hausch, R., and Tang, A. (2006). *Investigation of Haptic Feedback in the Driver Seat*. In *Proceedings of 9th International IEEE Conference on Intelligent Transportation Systems (ITSC 2006)*. (September 17-20, Toronto, Canada). (Acceptance: 286/424 – 68%)

Miyaoku, K., Tang, A., and Fels, S. (2006). *C-Band: A Flexible Color Ring Tag System*. In *Proceedings of Interaction 2006*. (March 2-3, Tokyo, Japan), pp: 3-10.

Siu, N., Iverson, L., and Tang, A. (2006). *Go with the Flow: Email Awareness and Task Management*. In *Proceedings of 2006 ACM Conference on Computer Supported Cooperative Work (CSCW 2006)*. (November 4-8, Banff, Alberta, Canada), pp: 441 – 450. ACM Press. (Acceptance: 47/212 – 22%)

Tang, A., Neustaedter, C., and Greenberg, S. (2006). *VideoArms: Embodiments for Mixed Presence Groupware*. In *Proceedings of 20th British HCI Group Annual Conference (HCI 2006)*. (September 11-15, Queen Mary, University of London). (Acceptance: 13/53 – 25%)

Tang, A., Tory, M., Po, B., Neumann, P., and Carpendale, M. S. T. (2006). *Collaborative Coupling over Tabletop Displays*. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI 2006)*. (April 24-27, Montreal, Canada), pp: 1181-1190. ACM Press. (Acceptance: 118/508 – 23%)

Kruger, R., Carpendale, M.S.T, Scott, S. D., and Tang, A. (2005). Fluid Orientation on a Tabletop Display: Integrating Rotation and Translation. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI 2005)*. (April 2-7, Portland, Oregon), pp: 601-610. ACM Press. (Acceptance: 93/371 – 25%)

Tang, A., McLachlan, P., Lowe, K., Saka, C. R., and MacLean, K. (2005). Perceiving Ordinal Data Haptically Under Workload. In *Proceedings of the Seventh International*

Conference on Multimodal Interfaces (ICMI 2005). (October 4-6, Trento, Italy), pp: 317-324. ACM Press. (Acceptance: 24/97 – 25%) [**Best Paper Award**]

Refereed conference videos

Tang, A., Greenberg, S., and Fels, S. (2009). Exploring Video Streams Using Slit-Tear Visualizations. In *Proceedings of the 27th international Conference Extended Abstracts on Human Factors in Computing Systems (CHI 2009)*. (April 4-9, 2009, Boston, USA). ACM Press. pp: 3509-3510. [**Best Research Video Nominee**]

Tang, A., Pattison, E. and Greenberg, S. (2005). DartMail: Digital Information Transfer through Physical Surrogates. In *Video Proceedings of the Ninth European Conference on Computer Supported Cooperative Work (ECSCW 2005)*. (September 18-22, Paris, France). ACM Press, duration 4:39.

Tang, A., Neustaedter, C. and Greenberg, S. (2004). VideoArms: Supporting Remote Embodiment in Groupware. In *Video Proceedings of the ACM CSCW Conference on Computer Supported Cooperative Work (CSCW 2004)*. (November 6-10, Chicago, Illinois). ACM Press, duration 5:20.

Other refereed contributions

Tang A. (2006). Surface Use in Meeting Room Collaboration. In *Conference Companion of 2006 ACM Conference on Computer Supported Cooperative Work (CSCW 2006)*. (November 4-8, Banff, Alberta, Canada), pp: 43-44. ACM Press. [Doctoral Colloquium]

Tang, A., Parker, J. K., Lanir, J., Booth, K. S. and Fels, S. (2006). Studying Collaborative Surface Use to Guide Large Display Interaction Design. In *Conference Companion of 2006 ACM Conference on Computer Supported Cooperative Work (CSCW 2006)*. (November 4-8, Banff, Alberta, Canada), pp: 219-220. ACM Press. [Interactive Poster]

Thesis

Tang, A. (2005). Embodiments in Mixed Presence Groupware. M.Sc. Thesis. University of Calgary, Calgary, AB. February, 2005.

Workshop papers

Tang, A. and Fels, S. (in press). *Four Lessons from Traditional MDEs*. ACM CSCW 2008 Workshop on Beyond the Laboratory: Supporting Authentic Collaboration with Multiplend Displays. Organized by Biehl, J., Golovchinsky, G., and Lyons, K.

Tang, A., Finke, M., Blackstock, M., Leung, R., Deutscher, M., Tain, G., and Giesbrecht, C. *Designing for Bystanders: Reflections on Building a Public Digital Forum*. ACM CHI 2008 Workshop on Designing and Evaluating Mobile Phone-based Interaction with Public Displays. Organized by Sas, C., and Dix, A.

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

Tang, A. and Greenberg, S. (2005). Supporting Awareness in Mixed Presence Groupware. ACM CHI 2005 Workshop on Awareness Systems: Known Results, Theory, Concepts and Future Challenges. Organized by Markopoulos, P., de Ruyter, B., and Mackay, W.

Technical Reports

Tang, A., Lanir, Y., Greenberg, S. and Fels, S. (2008). *Uncovering Activity and Patterns in Video using Slit-Tear Visualizations*. Report UBC CS Technical Report TR-2008-08, Department of Computer Science, University of British Columbia, Vancouver, British Columbia, Canada V6T 1Z4, July.

Tang, A., Lanir, J., Greenberg, S., and Fels, S. (2008). *Supporting Transitions in Work: Informing Groupware Design by Understanding Whiteboard Use*. Report UBC CS Technical Report TR-2008-04, Department of Computer Science, University of British Columbia, Vancouver, British Columbia, Canada V6T 1Z4, April.

Tang, A., and Fels, S. (2006). "What I Want, Where I Want:" Reference Material Use in Tabletop Work. Report UBC CS TR-2006-05, Department of Computer Science, University of British Columbia, Vancouver, British Columbia, Canada V6T 1Z4, March.

Tang, A., Kratt, D., Carpendale, S. and Dunning, A. (2003). Sensing and Visualising Physiological Arousal. Report 2003-727-30, Department of Computer Science, University of Calgary, Calgary, Alberta, Canada T2N 1N4, July.

Neustaedter, C., Elliot, K., Tang, A. and Greenberg, S. (2004). Where are you and when are you coming home? Foundations of Interpersonal Awareness. Report 2004-760-25, Department of Computer Science, University of Calgary, Calgary, Alberta, Canada T2N 1N4, September.

Supervision

Clement Leung, *Object Detection in Slit-Tear Visualizations*, ECEE 496 project, 2008

Roujari Manouchehri & Rimalda van Beurden, *Investigating Information Sharing between Tabletop and Upright Displays*, Undergraduate internship, 2007

Gregory Mason, *Shadow Touch: Interaction with Large Wall Displays*, ECEE 496 project, 2007 (co-supervised with Garth Shoemaker)

Invited Talks

Mixed presence groupware: Sharing a visual workspace with distributed teams. *Challenging Groupware: Emerging configurations for distributed interactions*. Organized by Dylan Tutt and Michael Fraser. Commonwealth Club, London, UK. February 12, 2008.

How and why wall and table displays will be used. *MAGIC Workshop on Large Displays*. Organized by Mattias Finke and Rodger Lea. University of British Columbia, Vancouver, BC. March 29, 2007.

Experience

Industry

Microsoft Research, Advanced Development Team, Seattle WA

Research intern: Responsible for the iterative design, prototyping and evaluation of several teleconferencing+shared workspace systems involving the Microsoft Surface.

Manager: Bill Buxton, Kori Inkpen, Michel Pahud
Spring, 2009

Microsoft Research, Adaptive Systems and Interaction, Seattle WA

Research intern: Responsible for the design and implementation of a contextually aware information management tool for programmers.

Manager: Gina Venolia
Summer, 2004

Microsoft, Mobile Services, Seattle WA

Program manager: Responsible for the user experience of PocketMSN, and for fostering and managing inter-team relationships related to its design.

Summer, 2002

Microsoft, Mobile Services, Seattle WA

Program manager: Responsible for identifying and analyzing market opportunities for InfoBot, a two-way SMS information retrieval service, and two-way SMS support for MSN Messenger. Guided cross-team design for both applications.

Summer, 2001

Microsoft, Visual C++ .NET, Seattle WA

Program manager: Investigated and identified design issues in the user interface of the programming tool Visual C++. Collaborated with usability engineers, designers and software design engineers to implement and test user interface enhancements.

Summer, 2000

National Research Council, Networking Group, Ottawa ON

Programmer: Implemented a monitoring and deployment tool for a Java-based agent system, modifying the existing infrastructure to allow lightweight encrypted communication and deployment.

Spring, 1999

Research

Psychology Department, Simon Fraser University, Burnaby BC

Research assistant: Responsible for running subjects in a study about close interpersonal relationships.
Spring, 2002

Teaching

Computer Science Department, University of British Columbia, Vancouver BC
Curriculum development: Designed two tutorials for a new fourth year HCI class covering field study methods.
Summer, 2006

Computer Science Department, Simon Fraser University, Burnaby BC
Teaching assistant: Graded assignments and provided 1-1 help to students in a third year AI class.
Fall, 2000

Art Shows

iWorks: Nickle Arts Museum, University of Calgary, Calgary AB, 2004

Service

Reviewer

CSCW 2010, UIST 2009, Tabletop 2009, CHI 2009, Tabletop 2008, CSCW 2008, InfoVis 2008, CHI 2008, GI 2007, CHI 2007, BCS-HCI 2006 (short papers), CSCW 2006, NIME 2006, GI 2006, CHI 2006, CHI 2005 (short papers), GROUP 2005, HCI 2005, ICMI 2005, UbiComp 2005, IEEE CG&A

Program Committee

CHI 2009 Work-In-Progress

Organization

GROUP 2007 (web & publicity co-chair)

Computer Science Graduate Society, University of Calgary
Vice President of Social Activities: 2003-2004

Discover SFU, Simon Fraser University
Orientation Leader: 1998-2001

Computer-Human Interaction Conference, Various
Student Volunteer: 2001-2005

Community Volunteering

High School Volleyball Head Coach: 2006, 2004