

# Jacob O. Wobbrock, Ph.D.

## Curriculum Vitae

The Information School  
University of Washington  
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### FACULTY POSITION

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Assistant Professor, The Information School 2006 – present  
Adjunct Assistant Professor, Department of Computer Science & Engineering 2006 – present  
University of Washington, Seattle, WA

**Research interests:** Human-computer interaction (HCI), specifically user interface technology, input and interaction techniques, human performance, accessible computing, surface computing, and mobile computing.

### EDUCATION

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#### Ph.D. Human-Computer Interaction, Carnegie Mellon University · 2001 – 2006

Official concentration in Computer Science. Committee: Brad A. Myers (chair), Scott E. Hudson, Jennifer Mankoff, Richard C. Simpson (University of Pittsburgh), and Shumin Zhai (IBM Almaden Research Center).

#### M.S. Computer Science, Stanford University · 1998 – 2000

Official concentration in Human-Computer Interaction. Advisor: Terry Winograd.

#### B.S. with Honors, Symbolic Systems, Stanford University · 1994 – 1998

Official concentration in Human-Computer Interaction. Advisor: Thomas Wasow.

### PUBLICATIONS

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#### Refereed Journal Articles

- [J.7] Wobbrock, J.O., Myers, B.A. and Aung, H.H. (2008) **The performance of hand postures in front- and back-of-device interaction for mobile computing.** *International Journal of Human-Computer Studies* 66 (12), pp. 857-875.
- [J.6] Wobbrock, J.O. and Gajos, K.Z. (2008) **Goal crossing with mice and trackballs for people with motor impairments: Performance, submovements, and design directions.** *ACM Transactions on Accessible Computing* 1 (1), pp. 4:1-37.
- [J.5] Wobbrock, J.O. and Myers, B.A. (2008) **Enabling devices, empowering people: The design and evaluation of Trackball EdgeWrite.** *Disability and Rehabilitation: Assistive Technology* 3 (1 & 2), pp. 35-56.
- [J.4] Wobbrock, J.O. and Myers, B.A. (2006) **Analyzing the input stream for character-level errors in unconstrained text entry evaluations.** *ACM Transactions on Computer-Human Interaction* 13 (4), pp. 458-489.
- [J.3] Wobbrock, J.O., Aung, H.H., Myers, B.A. and LoPresti, E.F. (2005) **Integrated text entry from power wheelchairs.** *Behaviour and Information Technology* 24 (3), pp. 187-203.
- [J.2] Myers, B.A., Nichols, J., Wobbrock, J.O. and Miller, R.C. (2004) **Taking handheld devices to the next level.** *IEEE Computer* 36 (12), pp. 36-43.
- [J.1] Heckman, C.E. and Wobbrock, J.O. (1999) **Liability for autonomous agent design.** *Journal of Autonomous Agents and Multi-Agent Systems* 2 (1), pp. 87-103.



#### Invited Articles

- [I.1] Wobbrock, J.O., Ko, A.J. and Kientz, J.A. (2009) **Reflections on the future of iSchools from inspired junior faculty.** *interactions* 16 (5), September + October, pp. 69-71.

## Refereed Conference Papers (Full)<sup>1</sup>

- [C.30] Kane, S.K., Jayant, C., Wobbrock, J.O. and Ladner, R.E. (2009) **Freedom to roam: A study of mobile device adoption and accessibility for people with visual and motor disabilities.** Proceedings of the ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '09). New York: ACM Press, pp. 115-122. <sup>[31%]</sup>
- [C.29] Kane, S.K., Avrahami, D., Wobbrock, J.O., Harrison, B., Rea, A., Philipose, M. and LaMarca, A. (2009) **Bonfire: A nomadic system for hybrid laptop-tabletop interaction.** Proceedings of the ACM Symposium on User Interface Software and Technology (UIST '09). New York: ACM Press, pp. 129-138. <sup>[19%]</sup>
- [C.28] Cherniavsky, N., Chon, J., Wobbrock, J.O., Ladner, R.E. and Riskin, E.A. (2009) **Activity analysis enabling real-time video communication on mobile phones for deaf users.** Proceedings of the ACM Symposium on User Interface Software and Technology (UIST '09). New York: ACM Press, pp. 79-88. <sup>[19%]</sup>
- [C.27] Wobbrock, J.O., Fogarty, J., Liu, S., Kimuro, S. and Harada, S. (2009) **The Angle Mouse: Target-agnostic dynamic gain adjustment based on angular deviation.** Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '09). New York: ACM Press, pp. 1401-1410. <sup>[24%]</sup>
- [C.26]  Wobbrock, J.O., Morris, M.R. and Wilson, A.D. (2009) **User-defined gestures for surface computing.** Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '09). New York: ACM Press, pp. 1083-1092. **BEST PAPER NOMINEE.** <sup>[24%, top 5%]</sup>
- [C.25] Harada, S., Wobbrock, J.O., Malkin, J., Bilmes, J. and Landay, J.A. (2009) **Longitudinal study of people learning to use continuous voice-based cursor control.** Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '09). New York: ACM Press, pp. 347-356. <sup>[24%]</sup>
- [C.24] Harada, S., Lester, J., Patel, K., Saponas, T.S., Fogarty, J., Landay, J.A. and Wobbrock, J.O. (2008) **VoiceLabel: Using speech to label mobile sensor data.** Proceedings of the ACM Int'l Conference on Multimodal Interfaces (ICMI '08). New York: ACM Press, pp. 69-76. <sup>[47%]</sup>
- [C.23] Kane, S.K., Bigham, J.P. and Wobbrock, J.O. (2008) **Slide Rule: Making mobile touch screens accessible to blind people using multi-touch interaction techniques.** Proceedings of the ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '08). New York: ACM Press, pp. 73-80. <sup>[37%]</sup>
- [C.22]  Kane, S.K., Wobbrock, J.O. and Smith, I.E. (2008) **Getting off the treadmill: Evaluating walking user interfaces for mobile devices in public spaces.** Proceedings of the ACM Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI '08). New York: ACM Press, pp. 109-118. **BEST PAPER AWARD.** <sup>[32%, top 2%]</sup>
- [C.21]  Wobbrock, J.O., Cutrell, E., Harada, S. and MacKenzie, I.S. (2008) **An error model for pointing based on Fitts' law.** Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '08). New York: ACM Press, pp. 1613-1622. **BEST PAPER AWARD.** <sup>[21%, top 1%]</sup>
- [C.20]  Gajos, K.Z., Wobbrock, J.O. and Weld, D.S. (2008) **Improving the performance of motor-impaired users with automatically-generated, ability-based interfaces.** Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '08). New York: ACM Press, pp. 1257-1266. **BEST PAPER AWARD.** <sup>[21%, top 1%]</sup>
- [C.19] Wobbrock, J.O., Rubinstein, J., Sawyer, M.W. and Duchowski, A.T. (2008) **Longitudinal evaluation of discrete consecutive gaze gestures for text entry.** Proceedings of the ACM Symposium on Eye Tracking Research and Applications (ETRA '08). New York: ACM Press, pp. 11-18. <sup>[40%]</sup>
- [C.18] Wobbrock, J.O. and Gajos, K.Z. (2007) **A comparison of area pointing and goal crossing for people with and without motor impairments.** Proceedings of the ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '07). New York: ACM Press, pp. 3-10. <sup>[31%]</sup>
- [C.17] Froehlich, J., Wobbrock, J.O. and Kane, S.K. (2007) **Barrier Pointing: Using physical edges to assist target acquisition on mobile device touch screens.** Proceedings of the ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '07). New York: ACM Press, pp. 19-26. <sup>[31%]</sup>

<sup>1</sup>Unlike in many academic fields, select conferences in human-computer interaction (e.g., CHI, UIST, ASSETS) are premier publication venues intended for archival papers only. These conferences may exceed most HCI journals in their selectivity, visibility and impact. For conference papers, acceptance rates appear in superscript brackets when available.

- [C.16] Harada, S., Wobbrock, J.O. and Landay, J.A. (2007) **VoiceDraw: A voice-driven hands-free drawing application.** Proceedings of the ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '07). New York: ACM Press, pp. 27-34. <sup>[31%]</sup>
- [C.15] Bigham, J., Cavender, A., Brudvik, J., Wobbrock, J.O. and Ladner, R. (2007) **WebinSitu: A comparative analysis of blind and sighted browsing behavior.** Proceedings of the ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '07). New York: ACM Press, pp. 51-58. <sup>[31%]</sup>
- [C.14] Wobbrock, J.O., Wilson, A.D. and Li, Y. (2007) **Gestures without libraries, toolkits or training: A \$1 recognizer for user interface prototypes.** Proceedings of the ACM Symposium on User Interface Software and Technology (UIST '07). New York: ACM Press, pp. 159-168. **SELECTED FOR REPRISE AT SIGGRAPH '08.** <sup>[17%]</sup>
- [C.13] Gajos, K.Z., Wobbrock, J.O. and Weld, D.S. (2007) **Automatically generating user interfaces adapted to users' motor and vision capabilities.** Proceedings of the ACM Symposium on User Interface Software and Technology (UIST '07). New York: ACM Press, pp. 231-240. <sup>[17%]</sup>
- [C.12] González, I.E., Wobbrock, J.O., Chau, D.H., Faulring, A. and Myers, B.A. (2007) **Eyes on the road, hands on the wheel: Thumb-based interaction techniques for input on steering wheels.** Proceedings of Graphics Interface (GI '07). Waterloo, Ontario: Canadian Human-Computer Communications Society, pp. 95-102. <sup>[41%]</sup>
- [C.11] Wobbrock, J.O., Chau, D.H. and Myers, B.A. (2007) **An alternative to push, press, and tap-tap-tap: Gesturing on an isometric joystick for mobile phone text entry.** Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '07). New York: ACM Press, pp. 667-676. <sup>[22%]</sup>
- [C.10] Wobbrock, J.O. and Myers, B.A. (2006) **From letters to words: Efficient stroke-based word completion for trackball text entry.** Proceedings of the ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '06). New York: ACM Press, pp. 2-9. <sup>[33%]</sup>
- [C.9]  Wobbrock, J.O. and Myers, B.A. (2006) **Trackball text entry for people with motor impairments.** Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '06). New York: ACM Press, pp. 479-488. **BEST PAPER AWARD.** <sup>[23%, top 1%]</sup>
- [C.8] Myers, B.A. and Wobbrock, J.O. (2005) **Text input to handheld devices for people with physical disabilities.** Proceedings of the 11th Int'l Conference on Human-Computer Interaction (HCI Int'l '05). Mahwah, New Jersey: Lawrence Erlbaum Associates. <sup>[39%]</sup>
- [C.7]  Wobbrock, J.O., Myers, B.A., Aung, H.H. and LoPresti, E.F. (2004) **Text entry from power wheelchairs: EdgeWrite for joysticks and touchpads.** Proceedings of the ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '04). New York: ACM Press, pp. 110-117. **BEST PAPER AWARD.** <sup>[53%, top 2%]</sup>
- [C.6] Wobbrock, J.O., Myers, B.A. and Aung, H.H. (2004) **Writing with a joystick: A comparison of date stamp, selection keyboard and EdgeWrite.** Proceedings of Graphics Interface (GI '04). Waterloo, Ontario: Canadian Human-Computer Communications Society, pp. 1-8. <sup>[38%]</sup>
- [C.5] Wobbrock, J.O., Myers, B.A. and Kembel, J.A. (2003) **EdgeWrite: A stylus-based text entry method designed for high accuracy and stability of motion.** Proceedings of the ACM Symposium on User Interface Software and Technology (UIST '03). New York: ACM Press, pp. 61-70. <sup>[22%]</sup>
- [C.4] Myers, B.A., Wobbrock, J.O., Yang, S., Yeung, B., Nichols, J. and Miller, R. (2002) **Using handhelds to help people with motor impairments.** Proceedings of the ACM SIGCAPH Conference on Assistive Technologies (ASSETS '02). New York: ACM Press, pp. 89-96. <sup>[41%]</sup>
- [C.3] Nichols, J., Wobbrock, J.O., Gergle, D. and Forlizzi, J. (2002) **Mediator and medium: Doors as interruption gateways and aesthetic displays.** Proceedings of the ACM Symposium on Designing Interactive Systems (DIS '02). New York: ACM Press, pp. 379-386. <sup>[22%]</sup>
- [C.2] Heckman, C.E. and Wobbrock, J.O. (2000) **Put your best face forward: Anthropomorphic agents, e-commerce consumers, and the law.** Proceedings of the ACM Conference on Autonomous Agents (AGENTS '00). New York: ACM Press, pp. 435-442. <sup>[24%]</sup>
- [C.1] Heckman, C.E. and Wobbrock, J.O. (1998) **Liability for autonomous agent design.** Proceedings of the ACM Conference on Autonomous Agents (AGENTS '98). New York: ACM Press, pp. 392-399. <sup>[32%]</sup>

## Refereed Conference Papers (Notes)<sup>2</sup>

- [N.7] Wobbrock, J.O. (2009) **TapSongs: Tapping rhythm-based passwords on a single binary sensor.** Proceedings of the ACM Symposium on User Interface Software and Technology (UIST '09). New York: ACM Press, pp. 93-96. <sup>[17%]</sup>
- [N.6] Gajos, K.Z., Weld, D.S. and Wobbrock, J.O. (2008) **Decision-theoretic user interface generation.** Proceedings of the 23rd AAAI Conference on Artificial Intelligence (AAAI '08). Menlo Park, California: AAAI Press, pp. 1532-1536. <sup>[21%]</sup>
- [N.5] Kane, S.K., Wobbrock, J.O., Harniss, M. and Johnson, K.L. (2008) **TrueKeys: Identifying and correcting typing errors for people with motor impairments.** Proceedings of the ACM Conference on Intelligent User Interfaces (IUI '08). New York: ACM Press, pp. 349-352. <sup>[30%]</sup>
- [N.4] Wobbrock, J.O., Myers, B.A. and Chau, D.H. (2006) **In-stroke word completion.** Proceedings of the ACM Symposium on User Interface Software and Technology (UIST '06). New York: ACM Press, pp. 333-336. <sup>[23%]</sup>
- [N.3] Wobbrock, J.O., Myers, B.A. and Rothrock, B. (2006) **Few-key text entry revisited: Mnemonic gestures on four keys.** Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '06). New York, ACM Press, pp. 489-492. <sup>[23%]</sup>
- [N.2] Wobbrock, J.O., Aung, H.H., Rothrock, B. and Myers, B.A. (2005) **Maximizing the guessability of symbolic input.** Extended Abstracts of the ACM Conference on Human Factors in Computing Systems (CHI '05). New York: ACM Press, pp. 1869-1872. <sup>[25%]</sup>
- [N.1] Wobbrock, J.O., Forlizzi, J., Hudson, S.E. and Myers, B.A. (2002) **WebThumb: Interaction techniques for small-screen browsers.** Proceedings of the ACM Symposium on User Interface Software and Technology (UIST '02). New York: ACM Press, pp. 205-208. <sup>[22%]</sup>

## Refereed Conference Papers (Posters)

- [P.8] Choe, E.K., Shinohara, K., Chilana, P.K., Dixon, M. and Wobbrock, J.O. (2009) **Exploring the design of accessible goal crossing desktop widgets.** Extended Abstracts of the ACM Conference on Human Factors in Computing Systems (CHI '09). New York: ACM Press, pp. 3733-3738.
- [P.7] Kane, S.K. and Wobbrock, J.O. (2007) **Automatically correcting typing errors for people with motor impairments.** Adjunct Proceedings of the ACM Symposium on User Interface Software and Technology (UIST '07). New York: ACM Press, pp. 59-60.
- [P.6] Chau, D.H., Wobbrock, J.O., Myers, B.A. and Rothrock, B. (2006) **Integrating isometric joysticks into mobile phones for text entry.** Extended Abstracts of the ACM Conference on Human Factors in Computing Systems (CHI '06). New York: ACM Press, pp. 640-645. <sup>[50%]</sup>
- [P.5] Wobbrock, J.O. and Myers, B.A. (2005) **Gestural text entry on multiple devices.** Proceedings of the ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '05). New York: ACM Press, pp. 184-185. <sup>[38%]</sup>
- [P.4] Wobbrock, J.O. and Myers, B.A. (2005) **EdgeWrite: A new text entry technique designed for stability.** Proceedings of the RESNA 28th Annual Conference (RESNA '05). Arlington, Virginia: RESNA Press. On proceedings CD.
- [P.3] Wobbrock, J.O., Myers, B.A. and Aung, H.H. (2004) **Joystick text entry with date stamp, selection keyboard and EdgeWrite.** Extended Abstracts of the ACM Conference on Human Factors in Computing Systems (CHI '04). New York: ACM Press, p. 1550. <sup>[37%]</sup>
- [P.2] Wobbrock, J.O. (2003) **The benefits of physical edges in gesture-making: Empirical support for an edge-based unistroke alphabet.** Extended Abstracts of the ACM Conference on Human Factors in Computing Systems (CHI '03). New York: ACM Press, pp. 942-943.
- [P.1] Wobbrock, J.O. (2002) **In your own words: Using full sentences as feedback.** Extended Abstracts of the ACM Conference on Human Factors in Computing Systems (CHI '02). New York: ACM Press, pp. 866-867.

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<sup>2</sup>Although Notes are shorter than full papers, they are just as rigorously peer-reviewed and often exhibit even lower acceptance rates. CHI Notes and UIST TechNotes, especially, are considered significant contributions to the field of HCI.


### Refereed Workshop Papers

- [W.7] Harada, S., Wobbrock, J.O. and Landay, J.A. (2009) **Beyond speech recognition: Improving voice-driven access to computers.** Proceedings of the 2009 IEEE-IBM Accessing the Future Conference. Boston, Massachusetts (July 21-22, 2009).
- [W.6] Chilana, P.K., Ko, A.J. and Wobbrock, J.O. (2009) **Designing software for unfamiliar domains.** Workshop on Cooperative and Human Aspects of Software Engineering (CHASE '09). In Companion of the 31st International Conference on Software Engineering (ICSE '09). Washington, D.C.: IEEE Computer Society, p. 22.
- [W.5] Wobbrock, J.O., Rubinstein, J., Sawyer, M. and Duchowski, A.T. (2007) **Not typing but writing: Eye-based text entry using letter-like gestures.** Proceedings of the 3rd Annual Conference on Communication by Gaze Interaction (COGAIN '07). De Montfort University, Leicester, UK. IST FP6 European Project, pp. 61-64. <sup>[62%]</sup>
- [W.4] Wobbrock, J.O. (2006) **The future of mobile device research in HCI.** CHI 2006 Workshop Proceedings: "What is the Next Generation of Human-Computer Interaction?" Montreal, Quebec (April 22-27, 2006), pp. 131-134.
- [W.3] Wobbrock, J.O. (2006) **A robust design for accessible text entry.** Accessibility and Computing: The Newsletter of ACM SIGACCESS (no. 84, January 2006). New York: ACM Press, pp. 48-51. First appeared in the Doctoral Consortium of ACM ASSETS 2005.
- [W.2] Wobbrock, J.O., Myers, B.A. and Hudson, S.E. (2003) **Exploring edge-based input techniques for handheld text entry.** Proceedings of the 3rd Int'l Workshop on Smart Appliances and Wearable Computing (IWSAWC '03). In Proceedings of the 23rd IEEE Conference on Distributed Computing Systems Workshops (ICDCSW '03). Los Alamitos, California: IEEE Computer Society, pp. 280-282.
- [W.1] Myers, B.A., Nichols, J., Wobbrock, J.O., Litwack, K., Higgins, M., Hughes, J., Harris, T.K., Rosenfeld, R. and Pignol, M. (2003) **Handheld devices for control.** Proceedings of the Human-Computer Interaction Consortium (HCIC '03). Winter Park, Colorado (February 5-9, 2003).

### Book Chapters

- [B.2] Wobbrock, J.O. (2007) **Measures of text entry performance.** Ch. 3 in MacKenzie and Tanaka-Ishii (eds.), Text Entry Systems: Mobility, Accessibility, Universality. San Francisco: Morgan Kaufmann, pp. 47-74.
- [B.1] Wobbrock, J.O. and Myers, B.A. (2007) **Adding gestural text entry to input devices for people with motor impairments.** Chapter 14 in J. Lazar (ed.), Universal Usability: Designing Computer Interfaces for Diverse User Populations. New York: John Wiley & Sons, pp. 421-456.

### Technical Reports

- [T.1]  Wobbrock, J.O. (2006) **EdgeWrite: A versatile design for text entry and control.** Technical report CMU-HCII-06-104. Carnegie Mellon University, Pittsburgh, Pennsylvania. **SCS DISTINGUISHED DISSERTATION AWARD.**

### Patents

- [A.7] Dehlin, J.P., Chen, C.S., Wilson, A.D., Robbins, D.C., Horvitz, E.J., Hinckley, K.P. and Wobbrock, J.O. **Recognizing gestures and using gestures for interacting with software applications.** Filed June 28, 2004 as application #10/880,167. Issued April 14, 2009 as U.S. #7,519,223.
- [A.6] Kembel, J.A., Kembel, G.A., Medrano, A.P., Kim, D.S., Russell, J., Wobbrock, J., Kembel, G.S., Kembel, J.L., Gabbay, L.D., Malloy, S.J., Bella, J.A., Devulkar, S.T. and Wallin, M. **Apparatus and method for tracing the distribution of diversely sourced internet content.** Filed April 26, 2000 as application #09/558,924. Issued April 8, 2008 as U.S. #7,356,569.
- [A.5] Kembel, J.A., Kembel, G.A., Kim, D.S., Russell, J., Wobbrock, J., Kembel, G.S., Kembel, J.L. and Gabbay, L.D. **Component for coordinating the accessing and rendering of an application media package.** Filed October 31, 2007 as application #11/932,427. Patent pending.
- [A.4] Kembel, J.A., Kembel, G.A., Kim, D.S., Russell, J., Wobbrock, J., Kembel, G.S., Kembel, J.L., Bella, J.A., Devulkar, S.T. and Wallin, M. **Server including components for accessing and displaying internet content and for providing same to a client.** Filed October 31, 2007 as application #11/932,340. Patent pending.

- [A.3] Kembel, J.A., Kembel, G.A., Kim, D.S., Russell, J., Wobbrock, J., Kembel, G.S., Kembel, J.L. and Gabbay, L.D. **Component for accessing and displaying internet content.** Filed October 31, 2007 as application #11/932,286. Patent pending.
- [A.2] Wobbrock, J.O. and Myers, B.A. **Using edges and corners for character input.** Filed March 29, 2004 as application #10/811,761. Patent pending.
- [A.1] Kembel, J.A., Kembel, G.A., Kembel, G.S., Kembel, J., Medrano, T., Kim, D., Russell, J., Wobbrock, J., Gabbay, L., Malloy, S., Malloy, A., Chipkin, D., Roddy, B. and Walkowski, D. **Apparatus and method for delivering internet content.** Filed April 26, 2000. Issued November 2, 2000 as international #WO/2000/065763.

## GRANTS AND GIFTS

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- NSF** National Science Foundation. EAGER: An Empirical Exploration of Contemplative Multitasking [IIS-0942646], PI David M. Levy and Co-PI Jacob O. Wobbrock. 2009-2010: \$127,872.
- NSF** National Science Foundation. HCC-Small: The End of Pointing and Clicking: Improving Computer Access with Goal Crossing [IIS-0811063], PI Jacob O. Wobbrock and Co-PIs Kurt L. Johnson and Daniel S. Weld. 2008-2011: \$448,905. Awarded an REU Supplement to fund undergraduate research. 2009-2010: \$16,000.
- NSF** National Science Foundation. HCC-Small: MobileASL: Providing Mobile Video Communications to the Deaf Community through User-Centered Design and Deployment [IIS-0811884], PI Eve A. Riskin and Co-PIs Richard E. Ladner and Jacob O. Wobbrock. 2008-2011: \$449,930.
- RRF** University of Washington Royalty Research Fund (RRF). Beyond speech recognition: Harnessing the power of voice for effective control of computer interfaces, by James A. Landay and Jacob O. Wobbrock. 2008-2009: \$38,000.
- INTEL** Intel Corporation. Support for software development for HCI research. 2008: \$35,000.
- MSFT** Microsoft Research. Support for AIM Research Group. 2008: \$50,000.
- NISH** NISH. Award for VoiceDraw project with Susumu Harada and James A. Landay. 2008: \$5,000.
- WRF** Washington Research Foundation (WRF). Support for development of iPod EdgeWrite. 2007: \$20,000.
- INTEL** Intel Research Seattle. Support for research on new input and interaction techniques, assistive technologies, mobile computing interfaces, and other areas of HCI. 2006: \$25,000.

## BEST PAPER AWARDS

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- Best Paper Nomination, ACM Conference on Human Factors in Computing Systems (CHI 2009)**  
Wobbrock, Morris & Wilson: "User-defined gestures for surface computing." (Top 5% of 750 submissions.)
- Best Paper Winner, ACM Conference on HCI with Mobile Devices and Services (MobileHCI 2008)**  
Kane, Wobbrock & Smith: "Getting off the treadmill: Evaluating walking user interfaces for mobile devices in public spaces." (Top 2% of 200 submissions.)
- Best Paper Winner, ACM Conference on Human Factors in Computing Systems (CHI 2008)**  
Wobbrock, Cutrell, Harada & MacKenzie: "An error model for pointing based on Fitts' law." (Top 1% of 710 submissions.)
- Best Paper Winner, ACM Conference on Human Factors in Computing Systems (CHI 2008)**  
Gajos, Wobbrock & Weld: "Improving the performance of motor-impaired users with automatically-generated, ability-based interfaces." (Top 1% of 710 submissions.)
- Best Paper Winner, ACM Conference on Human Factors in Computing Systems (CHI 2006)**  
Wobbrock & Myers: "Trackball text entry for people with motor impairments." (Top 1% of 350 submissions.)
- Best Paper Winner, ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2004)**  
Wobbrock, Myers, Aung & LoPresti: "Text entry from power wheelchairs: EdgeWrite for joysticks and touchpads." (Best of 50 submissions.)

## OTHER HONORS & AWARDS

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### **Honorable Mention, NISH National Scholar Award for Workplace Innovation and Design (2009)**

For essay entitled, "Fully accessible touch screens for the blind and visually impaired," co-authored with Shaun K. Kane and Jeffrey P. Bigham.

### **2nd Place, NISH National Scholar Award for Workplace Innovation and Design (2008)**

For essay entitled, "Hands-free voice-driven drawing and diagram creation method for people with motor impairments," co-authored with Susumu Harada and James A. Landay. Award included \$10,000 and an invitation for Mr. Harada to attend the NISH Grassroots Advocacy Training Conference, June 10-13 in Washington, D.C.

### **1st Place, NISH National Scholar Award for Workplace Innovation and Design (2005)**

For essay entitled, "Accessible handheld and desktop text entry for people with motor impairments" co-authored with Brad A. Myers. Award included \$20,000 and an invitation for me to attend the NISH National Training and Achievement Conference, May 22-24 in New Orleans.

### **SCS Distinguished Dissertation Award, Carnegie Mellon University (2006-2007)**

For dissertation entitled, "EdgeWrite: A versatile design for text entry and control." Award included \$500 and an invited lecture at the School of Computer Science, Carnegie Mellon University.

### **National Science Foundation IGERT Fellow (2004)**

For research in Assistive Technology, Carnegie Mellon University.

### **Robert M. Golden Medal for Excellence in Humanities and Creative Arts (1998)**

For undergraduate honors thesis entitled, "The law and policy of autonomous software agents." Award included \$200, Stanford University.

## POPULAR PRESS

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1. Nick Eaton. "Tabletop UI, wireless power and more from Intel Labs Seattle." Seattle Post-Intelligencer Blogs. September 30, 2009.
2. Staff. "Tuning technology to special needs." Information School News, May 28, 2009.
3. Larry Greenemeier. "Microsoft tries to get a grip on touch computing with Surface." 60-Second Science Blog, Scientific American, April 11, 2009.
4. Ina Fried. "Microsoft puts finger on better gestures." C|NET News, April 6, 2009.
5. Ivanhoe Newswire. "Pimp my program: Help for the disabled." Television news release, March 2009.
6. Richard Seven. "Researchers work on developing sign language for cellphones." Seattle Times, Health, December 2, 2008.
7. Richard Seven. "UW creates a computer mouse driven by sound." Seattle Times, Business/Technology, October 6, 2008.
8. Robert P. Bennett. "Squaring off with EdgeWrite." Disaboom, Tech & Tools, September 23, 2008.
9. Lee Bruno. "An interface for your eyes only." The Guardian (U.K.), August 28, 2008.
10. Hannah Hickey. "Signing by cell: Can you see me now?" University of Washington News Office, August 21, 2008.
11. Microsoft Corporation. "The Dobbs Challenge—Contest winners announced!" Mr. Spiff's Revenge by POW Studios, Best Windows Game, August 2, 2008.
12. Hannah Hickey. "For your eyes only: Custom interfaces make computer clicking faster, easier." University of Washington News Office, July 15, 2008.
13. Lynne Harris. "NISH recognizes college engineers for inventions designed to help people with disabilities in the workplace." National press release, June 11, 2008.
14. Staff. "iSchool garners three Best Paper Awards at CHI 2008." Information School News, April 4, 2008.
15. Virginia Gold. "SIGCHI announces Best of CHI 2008 award winners." ACM News Release, April 3, 2008.
16. Staff. "Dominating DUB." Etc: Campus News & Notes. University Week 25 (18), February 28, 2008, p. 3.
17. Staff. "COMPUTER: Malen mit der Stimme." Der Spiegel 43, October 22, 2007, p. 215.
18. Patrick Pettibon. "CMU, Pitt receive \$15 million research grant." The Tartan, August 28, 2006.
19. Holly Witteman. "Perspectives on CHI 2006." SIGCHI Bulletin 38 (3), July 2006.
20. Ivanhoe Broadcast News. "Hi-tech typing." Television news release, October 2005.
21. Vicki Contavespi. "NISH announces winners of 2004-2005 National Scholar Awards for Workplace Innovation & Design." National press release, May 2005.
22. Byron Spice. "Text with an edge." Pittsburgh Post-Gazette, Monday, November 29, 2004, p. A-6. Full-page feature.
23. Todd Bishop. "Microsoft DemoFest offers look at latest university research." Seattle Post-Intelligencer, Wednesday, August 4, 2004, p. E-1.
24. Staff. "Prototype: Write steady." Technology Review 108 (8), August 2005, p. 27.
25. Staff. "Science honors." Science & Environment. Pittsburgh Post-Gazette, Monday, July 4, 2005, p. A-6.
26. Staff. "Personal mention." Carnegie Mellon 8½ × 11 News 15 (46), June 9, 2005.

27. Steve August. "Debugging the user code, part 2: Integrating users into product development." productmarketing.com Magazine 2 (1), January/February 2004, pp. 17-23.
28. Alison Overholt. "Sidebar: Pardon the interruption." Fast Company Magazine 63, October 2002, p. 118.

## TEACHING

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### University of Washington

INSC 570 [INSTRUCTOR] Research Design (Autumn 2006, 2007, 2008, 2009)  
 IMT 540A [INSTRUCTOR] Design Methods for Interaction and Systems (Autumn 2007, 2008, 2009)  
 INFO 498B [INSTRUCTOR] Special Topics: Input and Interaction (Spring 2008, 2009)  
 INFO 444 [INSTRUCTOR] Value Sensitive Design (Spring 2007)

### Carnegie Mellon University

HCI 291 [CO-INSTRUCTOR] HCI for Computer Scientists (Spring 2004)  
 HCI 413 [TA] Human Factors (Autumn 2004)

### Stanford University

CS 147 [TA] Introduction to Human-Computer Interaction Design (Autumn 1998, 1999)  
 CS 201 [TA] Computers, Ethics & Social Responsibility (Winter 1999)  
 CS 247B [TA] HCI Contextual and Organizational Issues (Spring 1999)  
 CS 106X [TA] Programming Methodology and Abstractions (Spring 1999)  
 CS 106A [TA] Programming Methodology (Autumn 1997)

## CONSULTING

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1. Natural Input Solutions – Toronto, ON (2008-2009)
2. Microsoft Research – Redmond, WA (2007-2008)
3. K&L Gates law firm – Seattle, WA (2007-2008)

## INDUSTRY EXPERIENCE

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1. Research Intern, Microsoft Research – Redmond, WA (Summer 2003)
2. User Interface Consultant, Ingrian Networks – Redwood City, CA (Summer 2002)
3. User Interface Contractor, Google – Mountain View, CA (Spring 2001)
4. Senior User Interface Engineer, DoDots – Sunnyvale, CA (1999 – 2001)
5. Technical Intern, Intel-Mattel Smart Toy Lab – Portland, OR (Summer 1999)
6. Technical Intern, Intel Corporation – Hillsboro, OR (Summer 1997)

## ADVISING, SERVICE, AND PROFESSIONAL ACTIVITIES

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### Invited Presentations

#### Keynotes and Plenaries

WritersUA Conference for Software User Assistance: 2009, 2010 (confirmed).  
 InfoCamp Seattle: 2008.

#### External Talks

Distinguished Lecture, School of Computer Science, Carnegie Mellon University: 2008.  
 HCI Seminar, Computer Science Department, University of Illinois Urbana-Champaign: 2008.  
 Washington State Bar Association: 2007.  
 NISH National Training and Achievement Conference: 2005.  
 Microsoft Research Tech Fair, Invited Demo at the Library of Congress: 2005.

#### Internal Talks

University of Washington Board of Regents: 2009.  
 Research Conversation, Information School, University of Washington: 2009.  
 Design:Use:Build (DUB) Group, University of Washington: 2007, 2008, 2009.  
 Design Machine Group (DMG), Architecture Department, University of Washington: 2008.  
 Technology and Disability, Rehabilitation Medicine, University of Washington: 2008.  
 Technical Communication Seminar, University of Washington: 2007.  
 iEdge, ASIS&T Chapter, University of Washington: 2007.

## Student Advising

### Ph.D. Advisees and Co-advisees (UW)

Kristen Shinohara, Advisor, Ph.D. in Information Science, 2008–.  
 Eun Kyoung Choe, Co-advisor with Julie Kientz, Ph.D. in Information Science, 2008–.  
 Parmit K. Chilana, Co-advisor with Andrew J. Ko, Ph.D. in Information Science, 2008–.  
 Shaun K. Kane, Advisor, Ph.D. in Information Science, 2006–.  
 Susumu Harada, Co-advisor with James A. Landay, Ph.D. in Computer Science, 2006–.  
 Krzysztof Z. Gajos, Co-advisor with Daniel S. Weld, Ph.D. in Computer Science, 2006–2008. *Now at Harvard University.*

### Ph.D. Dissertation Committees (UW)

Jaehong Chon, Ph.D. dissertation GSR, Electrical Engineering, 2009–.  
 Chandrika Jayant, Ph.D. dissertation committee, Computer Science, 2009–.  
 Jeff Huang, Ph.D. dissertation committee, Information Science, 2009–.  
 Neva Cherniavsky, Ph.D. dissertation committee, Computer Science, 2008–2009. *Now at INRIA, France.*  
 Colin Birge, Ph.D. dissertation committee, Technical Communication, 2008–.  
 Craig M. Prince, Ph.D. dissertation committee, Computer Science, 2007–.  
 Alan L. Liu, Ph.D. dissertation committee, Computer Science, 2007–.  
 Anna Cavender, Ph.D. dissertation committee, Computer Science, 2007–.  
 Jeffrey Bigham, Ph.D. dissertation committee, Computer Science, 2006–2009. *Now at University of Rochester.*  
 Jerrod A. Larson, Ph.D. dissertation GSR, Technical Communication, 2008–2009. *Now at Boeing.*  
 Jon DeShazo, Ph.D. dissertation GSR, Biomedical & Health Informatics, 2007–2009. *Now at Virginia Commonwealth University.*

### Ph.D. Dissertation Committees (non-UW)

James Clawson, Ph.D. dissertation committee, Human Centered Computing (Georgia Tech), 2008–.

### Other Research Advising (UW)

Leah Findlater, Postdoctoral Fellow, Information School, 2009–.  
 Alex Jansen, NSF REU Scholar, Informatics, 2009–.  
 Peter Kamb, NSF REU Scholar, Informatics, 2009–.

## Departmental Service

### University of Washington

Ph.D. Committee: 2007-2009.  
 Ph.D. Admissions Committee: 2006-2007, 2008-2009.  
 Recognition & Nomination Committee: 2006-2008.  
 Social Committee: 2006-2007.  
 HCI Faculty Search Committee: 2007-2008.

### Carnegie Mellon University

Founding Committee, 15-291: HCI for Computer Scientists: 2003.  
 Ph.D. Admissions Committee in Human-Computer Interaction: 2002.

## Professional Service

### Board Member

Statewide Website Advisory Group (SWAG), Washington State Access to Justice Board.

### Associate Editor (AE)

Advances in Human-Computer Interaction (Hindawi Publishing): 2007–.

### Conference Committees (CCs)

ACM CHI Workshops Co-Chair: 2010, 2011.

### Program Committees (PCs)

ACM UIST: 2007, 2009.

ACM CHI: 2008, 2009.  
ACM ASSETS: 2008, 2010.  
Pervasive: 2007.

### **Doctoral Consortia (DCs)**

ACM ASSETS: 2007.

### **Peer Reviewing**

ACM CHI: 2003, 2004, 2005, 2006, 2007, 2008, 2009.  
ACM UIST: 2004, 2005, 2006, 2007, 2008, 2009.  
Human-Computer Interaction Journal: 2003, 2004, 2005, 2006, 2009.  
ACM Transactions on Computer-Human Interaction (TOCHI): 2006, 2008, 2009.  
ACM Transactions on Accessible Computing (TACCESS): 2007, 2008.  
International Journal of Human-Computer Studies (IJHCS): 2007, 2008.  
IEEE Int'l Symposium on Wearable Computers (ISWC): 2005, 2008.  
Graphics Interface (GI): 2006, 2007.  
ACM ASSETS: 2008.  
ACM CSCW: 2008.  
ACM IUI: 2008.  
ACM Computing Surveys: 2008, 2009.  
Interacting with Computers (IwC): 2009.  
IEEE Tabletop and Interactive Surfaces: 2008.  
RESNA Assistive Technology Journal: 2008.  
Universal Access in the Information Society (UAIS): 2007.  
Pervasive: 2007.  
Journal of the American Society for Information Science & Technology (JASIST): 2006.  
ACM ICMI: 2006.  
IEEE Computer: 2003.  
British HCI Group Annual Conference (HCI): 2002.

### **Student Volunteer (SV)**

ACM UIST: 2002, 2004.

### **Memberships**

Association for Computing Machinery (ACM).  
Special interest group in Computer-Human Interaction (SIGCHI).  
Special interest group in Accessible Computing (SIGACCESS).  
Completed HIPAA training, School of Medicine, University of Washington.

### **Computer Programming**

C#/Windows Forms, C#/WPF, VC++/MFC, C/C++, Visual Basic, Palm OS API, Win32 API, Java, JavaScript, D/HTML.