



## Terry Winograd

Professor of Computer Science, Emeritus

### Bio

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#### BIO

Professor Winograd's focus is on human-computer interaction design and the design of technologies for development. He directs the teaching programs and HCI research in the Stanford Human-Computer Interaction Group, which recently celebrated its 20th anniversary. He is also a founding faculty member of the Hasso Plattner Institute of Design at Stanford (the "d.school") and on the faculty of the Center on Democracy, Development, and the Rule of Law (CDDRL)

Winograd was a founding member and past president of Computer Professionals for Social Responsibility. He is on a number of journal editorial boards, including Human Computer Interaction, ACM Transactions on Computer Human Interaction, and Informatica. He has advised a number of companies started by his students, including Google. In 2011 he received the ACM SIGCHI Lifetime Research Award.

#### ACADEMIC APPOINTMENTS

- Emeritus Faculty, Acad Council, Computer Science
- Member, Bio-X
- Faculty Affiliate, Institute for Human-Centered Artificial Intelligence (HAI)
- Member, Maternal & Child Health Research Institute (MCHRI)

#### ADMINISTRATIVE APPOINTMENTS

- Founder, Hasso Plattner Institute of Design, (2006- present)
- Co-director, Liberation Technology Program, (2009- present)

#### HONORS AND AWARDS

- Founders Award, Computer Professionals for Social Responsibility (1996)
- Rigo Award, SIGDOC (1999)
- Member, ACM CHI Academy (2004)
- Fellow, ACM (2009)
- Lifetime Research Award, ACM SIGCHI (2011)

#### PROGRAM AFFILIATIONS

- Symbolic Systems Program

## PROFESSIONAL EDUCATION

- PhD, MIT (1970)

## LINKS

- Home page: <http://hci.stanford.edu/winograd>

## Publications

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### PUBLICATIONS

- **SUPERPOWER GLASS MOBILE COMPUTING AND COMMUNICATIONS REVIEW**  
Kline, A., Voss, C., Washington, P., Haber, N., Schwartz, J., Tariq, Q., Winograd, T., Feinstein, C., Wall, D. P.  
2019; 23 (2): 35–38
- **Effect of Wearable Digital Intervention for Improving Socialization in Children With Autism Spectrum Disorder A Randomized Clinical Trial** *JAMA PEDIATRICS*  
Voss, C., Schwartz, J., Daniels, J., Kline, A., Haber, N., Washington, P., Tariq, Q., Robinson, T. N., Desai, M., Phillips, J. M., Feinstein, C., Winograd, T., Wall, et al  
2019; 173 (5): 446–54
- **Effect of Wearable Digital Intervention for Improving Socialization in Children With Autism Spectrum Disorder: A Randomized Clinical Trial.** *JAMA pediatrics*  
Voss, C., Schwartz, J., Daniels, J., Kline, A., Haber, N., Washington, P., Tariq, Q., Robinson, T. N., Desai, M., Phillips, J. M., Feinstein, C., Winograd, T., Wall, et al  
2019
- **Exploratory study examining the at-home feasibility of a wearable tool for social-affective learning in children with autism** *NPJ DIGITAL MEDICINE*  
Daniels, J., Schwartz, J. N., Voss, C., Haber, N., Fazel, A., Kline, A., Washington, P., Feinstein, C., Winograd, T., Wall, D. P.  
2018; 1
- **Exploratory study examining the at-home feasibility of a wearable tool for social-affective learning in children with autism.** *NPJ digital medicine*  
Daniels, J., Schwartz, J. N., Voss, C., Haber, N., Fazel, A., Kline, A., Washington, P., Feinstein, C., Winograd, T., Wall, D. P.  
2018; 1: 32
- **Feasibility Testing of a Wearable Behavioral Aid for Social Learning in Children with Autism** *APPLIED CLINICAL INFORMATICS*  
Daniels, J., Haber, N., Voss, C., Schwartz, J., Tamura, S., Fazel, A., Kline, A., Washington, P., Phillips, J., Winograd, T., Feinstein, C., Wall, D. P.  
2018; 9 (1): 129–40
- **Backtracking Events as Indicators of Usability Problems in Creation-Oriented Applications** *ACM TRANSACTIONS ON COMPUTER-HUMAN INTERACTION*  
Akers, D., Jeffries, R., Simpson, M., Winograd, T.  
2012; 19 (2)
- **The distance geometry of music** *17th Canadian Conference on Computational Geometry*  
Demaine, E. D., Gomez-Martin, F., Meijer, H., Rappaport, D., Taslakian, P., Toussaint, G. T., Winograd, T., Wood, D. R.  
ELSEVIER SCIENCE BV.2009: 429–54
- **Undo and Erase Events as Indicators of Usability Problems** *27th Annual CHI Conference on Human Factors in Computing Systems*  
Akers, D., Simpson, M., Jeffries, R., Winograd, T.  
ASSOC COMPUTING MACHINERY.2009: 659–668
- **Improving the Accuracy of Gaze Input for Interaction** *Eye Tracking Research and Applications Symposium*  
Kumar, M., Klingner, J., Puranik, R., Winograd, T., Paepcke, A.  
ASSOC COMPUTING MACHINERY.2008: 65–68
- **Taskpose: Exploring Fluid Boundaries in an Associative Window Visualization** *21st Annual ACM Symposium on User Interface Software and Technology*

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- Bernstein, M., Shrager, J., Winograd, T.  
ASSOC COMPUTING MACHINERY.2008: 231-234
- **Visual analysis of network flow data with timelines and event plots** *4th International Workshop on Computer Security*  
Phan, D., Gerth, J., Lee, M., Paepcke, A., Winograd, T.  
SPRINGER-VERLAG BERLIN.2008: 85-99
  - **The bodily incorporation of mechanical devices: Ethical and religious issues - (part 2)** *CAMBRIDGE QUARTERLY OF HEALTHCARE ETHICS*  
Campbell, C. S., Clark, L. A., Loy, D., Keenan, J. E., Matthews, K., Winograd, T., Zoloth, L.  
2007; 16 (3): 268-280
  - **The bodily incorporation of mechanical devices: Ethical and religious issues (part 1)** *CAMBRIDGE QUARTERLY OF HEALTHCARE ETHICS*  
Campbell, C. S., Clark, L. A., Loy, D., Keenan, J. F., Matthews, K., Winograd, T., Zoloth, L.  
2007; 16 (2): 229-239
  - **Eyepatch: Prototyping Camera-based Interaction through Examples** *20th Annual ACM Symposium on User Interface Software and Technology*  
Maynes-Aminzade, D., Winograd, T., Igarashi, T.  
ASSOC COMPUTING MACHINERY.2007: 33-42
  - **Gaze-enhanced Scrolling Techniques** *20th Annual ACM Symposium on User Interface Software and Technology*  
Kumar, M., Winograd, T.  
ASSOC COMPUTING MACHINERY.2007: 213-216
  - **EyePoint: Practical Pointing and Selection Using Gaze and Keyboard** *Conference on Human Factors in Computing Systems*  
Kumar, M., Paepcke, A., Winograd, T.  
ASSOC COMPUTING MACHINERY.2007: 421-430
  - **Shifting viewpoints: Artificial intelligence and human-computer interaction** *ARTIFICIAL INTELLIGENCE*  
Winograd, T.  
2006; 170 (18): 1256-1258
  - **Mediating group dynamics through tabletop interface design** *IEEE COMPUTER GRAPHICS AND APPLICATIONS*  
Morris, M. R., Cassanego, A., Paepcke, A., Winograd, T., Piper, A. M., Huang, A.  
2006; 26 (5): 65-73
  - **Designing a new foundation for design** *COMMUNICATIONS OF THE ACM*  
Winograd, T.  
2006; 49 (5): 71-73
  - **TeamSearch: Comparing techniques for co-present collaborative search of digital media** *1st IEEE International Workshop on Horizontal Interactive Human-Computer Systems*  
Morris, M. R., Paepcke, A., Winograd, T.  
IEEE COMPUTER SOC.2006: 97-104
  - **Alternative input devices for efficient navigation of large CT angiography data sets** *RADIOLOGY*  
Sherboncly, A., Holmlund, D., Rubin, G. D., Schraedley, P. K., Winograd, T., Napel, S.  
2005; 234 (2): 391-398
  - **Flow map layout** *IEEE Symposium on Information Visualization (InfoVis 05)*  
Phan, D., Xiao, L., Yeh, R., Hanrahan, P., Winograd, T.  
IEEE COMPUTER SOC.2005: 219-224
  - **Interactive workspaces** *COMPUTER*  
Johanson, B., Winograd, T., Fox, A.  
2003; 36 (4): 99-101
  - **Efficient web browsing on handheld devices using page and form summarization** *ACM TRANSACTIONS ON INFORMATION SYSTEMS*  
Buyukkokten, O., Kaljuvee, O., Garcia-Molina, H., Paepcke, A., Winograd, T.  
2002; 20 (1): 82-115

- **Extreme temporal photo browsing** *2nd International Workshop on Visual Interfaces to Digital Libraries held at the Joint Conference on Digital Libraries (JCDL)*  
Graham, A., Garcia-Molina, H., Paepcke, A., Winograd, T.  
SPRINGER-VERLAG BERLIN.2002: 81–97
- **Architectures for context** *HUMAN-COMPUTER INTERACTION*  
Winograd, T.  
2001; 16 (2-4): 401-419
- **Integrating information appliances into an interactive workspace** *IEEE COMPUTER GRAPHICS AND APPLICATIONS*  
Fox, A., Johanson, B., Hanrahan, P., Winograd, T.  
2000; 20 (3): 54-65
- **Designing the user interface for multimodal speech and pen-based gesture applications: State-of-the-art systems and future research directions** *HUMAN-COMPUTER INTERACTION*  
Oviatt, S., Cohen, P., Wu, L. Z., Vergo, J., Duncan, L., Suhm, B., Bers, J., Holzman, T., Winograd, T., Landay, J., Larson, J., Ferro, D.  
2000; 15 (4): 263-322
- **Interoperability for digital libraries worldwide** *COMMUNICATIONS OF THE ACM*  
Paepcke, A., Chang, C. C., Garcia-Molina, H., Winograd, T.  
1998; 41 (4): 33-43
- **The digital library integrated task environment (DLITE)** *2nd ACM International Conference on Digital Libraries (DL 97)*  
Cousins, S. B., Paepcke, A., Winograd, T., BIER, E. A., Pier, K.  
ASSOC COMPUTING MACHINERY.1997: 142–151
- **Interspace and an every-citizen interface to the national information infrastructure** *More Than Screen Deep Workshop - Toward Every-Citizen Interfaces to the Nations Information Infrastructure*  
Winograd, T.  
NATL ACADEMY PRESS.1997: 260–264
- **Using distributed objects for digital library interoperability** *COMPUTER*  
Paepcke, A., Cousins, S. B., GARCIAMOLINA, H., Hassan, S. W., Ketchpel, S. P., ROSCHEISEN, M., Winograd, T.  
1996; 29 (5): 61-?
- **Grassroots: A system providing a uniform framework for communicating, structuring, sharing information, and organizing people** *5th International World Wide Web Conference (WWW5)*  
Kamiya, K., ROSCHEISEN, M., Winograd, T.  
ELSEVIER SCIENCE BV.1996: 1157–74
- **A communication agreement framework for access/action control** *1996 IEEE Symposium on Security and Privacy*  
ROSCHEISEN, M., Winograd, T.  
I E E E, COMPUTER SOC PRESS.1996: 154–163
- **FROM PROGRAMMING ENVIRONMENTS TO ENVIRONMENTS FOR DESIGNING** *COMMUNICATIONS OF THE ACM*  
Winograd, T.  
1995; 38 (6): 65-74
- **BEYOND BROWSING - SHARED COMMENTS, SOAPS, TRAILS, AND ONLINE COMMUNITIES** *3rd International World-Wide Web Conference*  
ROSCHEISEN, M., Mogensen, C., Winograd, T.  
ELSEVIER SCIENCE BV.1995: 739–49
- **THE NORBERT-WIENER-AWARD FOR SOCIAL AND PROFESSIONAL-RESPONSIBILITY** *CYBERNETICA*  
Winograd, T.  
1994; 37 (3-4): 387-392
- **DESIGNING THE DESIGNER** *HUMAN-COMPUTER INTERACTION*  
Winograd, T.  
1994; 9 (1): 128-132

- **GROUPWARE - SYSTEMS-DESIGN FROM PERSPECTIVE OF GETTING THINGS DONE** *IEEE SOFTWARE*  
Winograd, T.  
1991; 8 (6): 81-82
- **ARE THINKING MACHINES POSSIBLE - ARE WE THEY** *REVISTA DE OCCIDENTE*  
Winograd, T.  
1991: 113-150
- **CAN RESEARCH REINVENT THE CORPORATION** *HARVARD BUSINESS REVIEW*  
ZUBOFF, S., SUTHERLAND, W. R., WLADAWSKYBERGER, I., SENGE, P. M., ARGYRIS, C., Schon, D. A., Ciborra, C. U., Winograd, T., GUILLE, B. R., Kraut, R. E., Yoshida, K., Fisher, P. A., Nakanishi, et al  
1991; 69 (2): 164-?
- **ON THE CRUELTY OF REALLY TEACHING COMPUTING SCIENCE** *COMMUNICATIONS OF THE ACM*  
Winograd, T.  
1989; 32 (12): 1412-1413
- **EXPERT SYSTEMS - HOW FAR CAN THEY GO .1.** *AI MAGAZINE*  
Davis, R., Winograd, T., DREYFUSS, S. E.  
1989; 10 (1): 61-67
- **WHERE THE ACTION IS** *BYTE*  
Winograd, T.  
1988; 13 (13): A256-?
- **COMPUTER-SYSTEMS AND THE DESIGN OF ORGANIZATIONAL INTERACTION** *ACM TRANSACTIONS ON OFFICE INFORMATION SYSTEMS*  
Flores, F., Graves, M., HARTFIELD, B., Winograd, T.  
1988; 6 (2): 153-172
- **SPECIAL ISSUE ON THE LANGUAGE ACTION PERSPECTIVE - INTRODUCTION** *ACM TRANSACTIONS ON OFFICE INFORMATION SYSTEMS*  
Winograd, T.  
1988; 6 (2): 83-86
- **ARTIFICIAL-INTELLIGENCE - WHERE ARE WE .2.** *ABACUS-NEW YORK*  
Bobrow, D. G., Hayes, P. J., LONGUETHIGGINS, C., McCarthy, J., Berliner, H., Michie, D., Nilsson, N., Brown, J. S., Feldman, J., Dreyfus, H., Dennett, D., Boden, M., Winograd, et al  
1987; 4 (4): 33-48
- **ARTIFICIAL-INTELLIGENCE - WHERE ARE WE - EXPERTS WHO EXCHANGE VIEWS ON THE FUTURE OF AI FIND THAT CONSENSUS IS DIFFICULT .1.** *ABACUS-NEW YORK*  
Bobrow, D. G., Hayes, P. J., AMAREL, S., Berliner, H., Boden, M. A., Brown, J. S., Dennett, D., Dreyfus, H., Feldman, J., LONGUETHIGGINS, H. C., McCarthy, J., McCorduck, P., Meltzer, et al  
1987; 4 (3): 8-?
- **MOVING THE SEMANTIC FULCRUM** *LINGUISTICS AND PHILOSOPHY*  
Winograd, T.  
1985; 8 (1): 91-104
- **COMPUTER SOFTWARE FOR WORKING WITH LANGUAGE** *SCIENTIFIC AMERICAN*  
Winograd, T.  
1984; 251 (3): 130-?
- **WHAT DOES IT MEAN TO UNDERSTAND LANGUAGE** *COGNITIVE SCIENCE*  
Winograd, T.  
1980; 4 (3): 209-241
- **EXTENDED INFERENCE MODES IN REASONING BY COMPUTER-SYSTEMS** *ARTIFICIAL INTELLIGENCE*  
Winograd, T.

1980; 13 (1-2): 5-26

- **BEYOND PROGRAMMING LANGUAGES** *COMMUNICATIONS OF THE ACM*

Winograd, T.

1979; 22 (7): 391-401

- **TOWARDS A PROCEDURAL UNDERSTANDING OF SEMANTICS** *REVUE INTERNATIONALE DE PHILOSOPHIE*

Winograd, T.

1976; 30 (117-): 260-303