

Johanna D. Moore

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Education

Ph.D., Computer Science, University of California at Los Angeles, December 1989.
M.S., Computer Science, University of California at Los Angeles, December 1982.
B.S., Mathematics and Computer Science (Summa Cum Laude), UCLA, June 1980.

Position

1998- Professor, Designated Chair in Artificial Intelligence, University of Edinburgh, UK.
1998- Director, Human Communication Research Centre, University of Edinburgh, UK.
1996-1998 Director, Intelligent Systems Program, University of Pittsburgh.
1996- Associate Professor of Computer Science and Intelligent Systems, University of Pittsburgh.
1996- Associate Professor of Linguistics, University of Pittsburgh.
1990-1996 Assistant Professor of Computer Science and Intelligent Systems, University of Pittsburgh.
1990- Research Scientist at Learning Research and Development Center, University of Pittsburgh.

Selected Awards and Honors

National Science Foundation, National Young Investigator Award, 1994-1999.
Invited Presentation, World Conference on Artificial Intelligence and Education, 1995.
Invited Presentation, 12th National Conference on Artificial Intelligence (AAAI), 1994.
Best Paper Presentation, International Workshop on Intelligent User Interfaces, 1993.
UCLA Graduate Affirmative Affairs Dissertation Year Fellowship, 1988-89.
International Business Machines Fellow, 1985-87.
Office of Naval Research Fellow, 1982-1985.
University of California Regents One Year Fellowship, 1980-81.
Phi Beta Kappa, UCLA 1980.
Valedictorian, North Hollywood High School, 1975.

Funded Research Grants

1996-1999 Steven Roth and Johanna Moore, Co-Principal Investigators, "Visualizations and Briefings that Acquire, Portray and Communicate Experience". DARPA Intelligent Collaboration and Visualization Initiative. Total award \$3,698,948. September 1, 1996 – August 31, 1999.
1994-1999 Principal Investigator, "Investigations in Natural Language Generation", NSF National Young Investigator Award. Base award \$125,000 with matching funds available to total \$500,000. September 1, 1994– August 30, 1997.
1994-1997 Johanna Moore and Steven Roth, Co-Principal Investigators, "Automated Explanatory Briefings with Coordinated Natural Language and Data Visualization". DARPA Human Computer Interaction Initiative. Total award \$1,872,119. September 1, 1994 – August 30, 1997.
1994-1997 Principal Investigator, "A Computational Model of Reflective Dialogue". Funded by ONR Cognitive and Neural Sciences Division. \$366,617. May 1, 1994 – November 15, 1997.
1994-1997 Principal Investigator, "Planning Explanations with Discourse Markers and References to Prior Explanations", ONR Cognitive and Neural Sciences Division under DoD FY93 Augmentation of Awards for Science and Engineering Research Training (ASSERT) Program. \$76,221.
1993-1996 Principal Investigator, "Using Discourse Markers to Structure Explanations in a Complex Real-World Domain", funded by ONR Cognitive and Neural Sciences Division under DoD FY92 Augmentation of Awards for Science and Engineering Research Training (ASSERT) Program. \$73,134.

- 1991-1994 Principal Investigator, "Participating in Reflective Dialogues a Complex Real World Domain", funded by the Office of Naval Research, Cognitive and Neural Sciences Division. \$195,794.
- 1992-1995 With Alan Lesgold and Arlene Weiner, "Tools for Thinking About Complex Issues in Science and Public Policy", funded by NSF Materials Development, Research and Informal Science Education Division, Applications of Advanced Technologies Program. \$1,000,000.
- 1991-1994 With Bruce Buchanan, Diana Forsythe, and Stellan Ohlsson, "Explanation in the Clinical Setting" funded by the National Library of Medicine. \$1,025,641.
- 1991-1993 Principal Investigator, "Contextual Issues in Tutorial Dialogues: A Study of the Effects of Previous Explanations", funded by NSF Research Initiation Award Program. \$57,068.

Publications related to proposal:

- Mittal, Vibhu O., Moore, Johanna D., Carenini, Giuseppe, and Roth, Steven F., "Describing Complex Charts in Natural Language: A Caption Generation System", *Computational Linguistics* 24(3):431-468, 1998.
- Moore, Johanna D., "Making Computer Tutors More Like Humans", *Journal of Artificial Intelligence in Education* 7(2):181-214, 1996.
- Moore, Johanna D., Lemaire, Benoît, and Rosenblum, James A., "Discourse Generation for Instructional Applications: Identifying and Exploiting Relevant Prior Explanations", *Journal of the Learning Sciences* 5(1):49-94, 1996.
- Moore, Johanna D. and Mittal, Vibhu O., "Dynamically Generated Follow-up Questions" *IEEE Computer* special issue on Interactive Natural Language Processing, July 1996, 75-86.
- Moore, J. D., "Participating in Explanatory Dialogues: Interpreting and Responding to Questions in Context", MIT Press, ACL-MIT Press Series in Natural Language Processing, 1995.

Other Publications:

- DiEugenio, Barbara, Moore, Johanna D. and Paolucci, Massimo, "Learning Features that Predict Discourse Cue Usage" in *Proceedings of the 35th Annual Meeting of the Association for Computational Linguistics*, Madrid, Spain, July 7-12 1997.
- Moser, Megan G. and Moore, Johanna D., "Toward a Synthesis of Two Accounts of Discourse Structure", *Computational Linguistics* 22(3):409-420, 1996.
- Buchanan, Bruce G., Moore, Johanna D., Forsythe, Diana E., Carenini, Giuseppe, Ohlsson, Stellan, and Banks, Gordon. "An Intelligent Interactive System for Delivering Individualized Information to Patients", in *Artificial Intelligence in Medicine*, 7(2):117-154, 1995.
- Moore, Johanna D. and Paris, Cécile L., "Planning Text for Advisory Dialogues: Capturing Intentional and Rhetorical Information", *Computational Linguistics* 19(4):651-695, 1993.
- Cavalli-Sforza, Violetta, Moore, Johanna D., and Suthers, Daniel D., "Helping Students Articulate and Criticize Scientific Explanations", *Proceedings of the World Conference on Artificial Intelligence in Education*, Edinburgh, Scotland, 1993.

Professional Service (Selected)

- Editor, *Computational Linguistics*, special issue on Empirical Methods in Discourse, Volume 23, Number 1, March 1997.
- Associate Editor, *Journal of Artificial Intelligence Research*, 1995-1998.
- Editorial Board, *Computational Linguistics*, 1994-1996.
- Editorial Board, *Journal of Artificial Intelligence Research*, 1994-1995.
- Steering Committee, ACM Special Interest Group on Intelligent User Interfaces
- Program Chair, ACM/SIGCHI International Conference on Intelligent User Interfaces, 1997.
- Tutorial Chair, 34th Annual Meeting of the Association for Computational Linguistics, 1996.
- Co-chair, AAAI Spring Symposium on Empirical Methods in Discourse Interpretation and Generation, March 1995.
- Senior Member Program Committee, 13th National Conference on Artificial Intelligence (AAAI), 1996.
- Program Co-chair, 17th Annual Meeting of the Cognitive Science Society, 1995.