

Biographical Sketch James F. Allen

Education

- 1979 Ph.D., Computer Science, University of Toronto
- 1975 M.S., Computer Science, University of Toronto
- 1973 B.A., Computer Science, University of Toronto

Professional Experience

- 1992-present John H. Dessauer Professor of Computer Science and Linguistics, U. Rochester
- 1996-98 Co-Director of Center for the Sciences of Language, U. Rochester
- 1992-96 Director, Cognitive Science Program, U. Rochester
- 1987-92 Professor, U. Rochester
- 1987-90 Chair, Computer Science Dept., U. Rochester
- 1984-87 Associate Professor, U. Rochester
- 1978-84 Assistant Professor, U. Rochester

Honors

- 1998 General Chair, 4th Int'l. Conf. on AI Planning Systems, Pittsburgh, PA
- 1997 Curtis Award for Excellence in Graduate Teaching, U. Rochester
- 1991-93 Member, AI Advisory Board, ARO Center of Excellence in AI at U. Pennsylvania
- 1991 Elected as AAAI Fellow
- 1990 General Chair, 2nd Int'l. Conf. on Principles of Knowledge Representation and Reasoning, Boston, MA
- 1984-89 Presidential Young Investigator Award Listed in *Who's Who in America*
- 1983-93 Editor in Chief, *Computational Linguistics*

Five Most Relevant Publications

- Allen, J.F., D.K. Byron, M. Dzikovska, G.M. Ferguson, L. Galescu, and A. Stent, "Towards a generic dialogue shell,:" to appear, *Natural Language Engineering*.
- Heeman, P. and J.F. Allen, "Speech Repairs, Intonational Phrases and Discourse Markers: Modeling Speaker's Utterances in Spoken Dialog," *Computational Linguistics* 25, 4, 1999.
- Ferguson, G.M. and J.F. Allen, "TRIPS: An integrated intelligent problem-solving assistant," Proc., Nat'l. Conf. on AI (AAAI-98), Madison, WI, 1998.
- Allen, J.F., B. Miller, E. Ringger, and T. Sikorski, "A Robust System for Natural Spoken Dialog," 31st Mtg., *Assoc'n. for Comput'l. Linguistics*, 62-70, Santa Cruz, CA, 1996.
- Allen, James F. et al., "The TRAINS Project: A Case Study in Defining a Conversational Planning Agent," *J. Experimental and Theoretical AI* 7, 7-48, 1995.

Five Other Significant Publications

- Allen, J.F., "AI Growing Up," *AI Magazine* 19, 4, 1998.
- Allen, J.F. *Natural Language Understanding*. Second Edition. Benjamin Cummings, 1995.
- Traum, D. and J.F. Allen, "Discourse obligations in dialogue processing," Proc., 32nd Annual Conf., *Assoc'n. for Computational Linguistics*, Las Cruces, NM, 1994.
- Litman, D. and J.F. Allen, "A plan recognition model for subdialogues in conversations," *Cognitive Science* 11, 2, 1987.
- Allen, J.F., "Maintaining knowledge about temporal intervals," *Commun. ACM* 26, 11, 1983.

Synergistic Activities

Authored the leading textbook in natural language processing in 1987, with a completely rewritten Second Edition in 1995.

Editor-in-Chief of *Computational Linguistics* from 1983 to 1993.

General Chair at international conferences: 4th Int'l. Conf. on AI Planning Systems, Pittsburgh, 1998; 2nd Int'l. Conf. on Principles of Knowledge Representation and Reasoning, Boston, 1990.

Principal advisor on 16 Ph.D. dissertations in the last twenty years, and secondary advisor on many more.

Extensive teaching: undergraduate and graduate level for over twenty years, tutorials at five international conferences; Received the Curtis Award for Excellence in Graduate Teaching, U. Rochester, 1998.

Research Accomplishments

James Allen's research interests lie at the intersection of language and reasoning, and span a range of issues including natural language understanding, dialogue systems, knowledge representation, common-sense reasoning and planning. He has made significant contributions in a wide range of areas in Artificial Intelligence, including groundbreaking work in plan-based models of speech acts, interval-based temporal reasoning, plan recognition and dialogue systems. In the last five years, he has been focusing on designing and building end-to-end real-time spoken dialogue systems that require and exploit common-sense reasoning to collaborate with the user. The Rochester Intelligent Planning System (TRIPS) is a planning assistant that can converse in spoken natural language with a person to create, discuss and evaluate various different plans and situations. The system can be used successfully to solve problems without any prior training of the user.

Collaborators and Other Affiliations

Recent Collaborators and Co-Authors in Last Four Years

Susan Brennan, SUNY Stony Brook

Mark Burstein, BBN Labs

Gregory Carlson, U. Rochester

Jason Eisner, U. Rochester

George M. Ferguson, U. Rochester

Joyce McDonough, U. Rochester

Brad Miller, Cycorp Inc. (Austin, TX)

Mari Ostendorf, U. Washington

Jeff Runner, U. Rochester

Lenhart K. Schubert, U. Rochester

Teresa Sikorski Zollo, U. Rochester

Mike Tanenhaus, U. Rochester

Greg Ward, Northwestern U.

Graduate Advisor

C.R. Perrault, SRI International

Thesis Advisees in Last Five Years (Total = 17)

Eric Ringger, 2000; Microsoft Corporation

Lou Hoebel, 1998; GE Labs

Peter Heeman, 1997; Oregon Graduate Institute

Recent Post-Doctoral Advisees

Neal Lesh, MERL Labs

Graduate Advisees

Donna K. Byron

Lucian Galescu

Amanda Stent

Myroslava Dzikovska

Joel Tetreault