Lynn Andrea Stein
Professor of Computer and Cognitive Science
Olin College of Engineering

Awards and honors and year received (list--no more than *five* items):

- National Science Foundation Young Investigator Award 1993
- Mary Ingraham Bunting Fellow/ONR Science Scholar, Radcliffe College/Harvard University 1998
- Invited Speaker, International Conference on Women in Engineering and Science 2005
- Paper Award, ASEE 2011
- Helen Plants Award, ASEE 2013

Have you previously been involved in any CRA activities? If so, describe.

- CRA-W Distributed Mentoring Project, Mentor/Ugrad Research Supervisor 1995;
- CRA Summit of Women in Computing Leaders, AAAI Representative 1999–2002;
- CRA Outstanding Undergraduate Award Committee 2008, 2009;
- CRA-E White Paper Initial Draft Reviewer 2010;
- CRA Snowbird Biennial Conference Committee 2010;
- CRA-E Committee Member 2010-2011;
- CRA-W Career Mentoring Workshops, Panelist/Mentor 2016, 2017

List any other relevant experience and year(s) it occurred (list—no more than *five* items).

- AAAI Councillor 1995-1998 (also symposium chair 94-96)
- Founding Faculty Member, Olin College of Engineering, 2000-present
- ACM Distinguished Lecturer 2008-2015
- NAE Grand Challenge Scholars Program, National Steering Committee, Founding Member 2009-2015
- Associate Dean for External Engagement and Initiatives; Director of the Collaboratory; [also member of president's cabinet and deans' council] Olin College 2009-2016 (inaugurated these positions, with varying titles during that period)

Research interests: (list only)

- Artificial Intelligence (knowledge representation, cognitive robotics), human-computer interaction; programming languages; philosophy of computing; computer science education; gender and engineering education; organizational change.

Personal Statement

After a decade on the MIT faculty (1990-2000), Stein joined Olin College's founding faculty, co-creating innovative computing curricula and a college-wide laboratory for educational innovation, then led Olin's efforts to collaboratively transform higher education in America and throughout the world. Stein's

computing research spans artificial intelligence, programming languages, and HCI: co-author of foundational documents of the semantic web, "mother" of humanoid robot and intelligent room, designer of personalized information systems. Stein pioneered simple robotics in the classroom, concurrency-first computing, and small-core CS curricula. As an international advocate for student-centered education and inclusive environments, she builds systems and programs for transformation.

Brief Biography or CV
(Attached)

Curriculum Vitae
Lynn Andrea Stein

Current Affiliation

Professor of Computer and Cognitive Science
Special Advisor to the Provost
Director of the Computers and Cognition Laboratory
Chair, Engineering Program Group
Franklin W. Olin College of Engineering
1 Olin Way
Needham, MA 02492

las@olin.edu

voice: +1 (781) 292-2525
fax: +1 (781) 292-2508

http://faculty.olin.edu/~las

Education

A.B. *cum laude*, Computer Science, Harvard and Radcliffe Colleges, Harvard University, 1986
Sc.M., Computer Science, Brown University, 1987
Ph.D., Computer Science, Brown University, 1990
Dissertation Title: *Resolving Ambiguity in Nonmonotonic Reasoning*
Dissertation Supervisor: Leora Morgenstern

Professional Appointments

1990-2001	Assistant Professor (1990-1992) Class of 1957 Assistant Professor (1992-1994) Class of 1957 Associate Professor (1994-1995) Associate Professor (1995-2001) Member of the Artificial Intelligence Laboratory (1990-2001) and the Laboratory for Computer Science (1996-2001) Department of Electrical Engineering and Computer Science Massachusetts Institute of Technology Sabbatical Leave Jan. 1998-Jan. 1999 Leave of Absence Sept. 2000-June 2001
1997-1998	Science Scholar (Sabbatical Leave Jan 1998-Jan 1999)
1998-1999	Mary Ingraham Bunting Institute Radcliffe College

Sept. 2000- *present*	Professor, Computer Science and Engineering (2000-2002) Professor, Computer and Cognitive Science (2002-*present*)
	Founding Director of the Initiative for Innovation in Engineering Education (October 2009-September 2013) Associate Dean for External Engagement and Initiatives (September 2012-August 2016) Director of the Collaboratory (September 2013-August 2016)
	Special Advisor to the Provost (September 2016-*present*)
	Director of the Computers and Cognition Laboratory Member of the Founding Faculty Franklin W. Olin College of Engineering Sabbatical Leave 2007-2008 Academic Year Sabbatical Leave (*planned*) 2017-2018 Academic Year
Sept. 2000- June 2004	Adjunct Professor (courtesy appointment) Department of Computer Science Brandeis University
Fall 2007 / Spring 2008	Visiting Scholar / Visiting Professor Guest of the Dean School of Engineering and Applied Sciences Harvard University
Sept. 2008- 2010	President's Visiting Scholar (courtesy appointment) Babson College

Awards and Honors

1984, 1985, 1986	Harvard College Scholarship
1986	A.B. *cum laude*, Harvard and Radcliffe Colleges
1986	University Fellowship, Brown University
1986	U.S. Department of Education Title IX Graduate Fellowship
1987	Elected Associate Member, Sigma Xi
1987	Honorable Mention, Best Paper Award, OOPSLA '87
1988, 1989	I.B.M. Graduate Fellowship
1989	Sigma Xi Graduate Student Award
1990	Elected Full Member, Sigma Xi
1992	General Electric Foundation Faculty for the Future Award
1992	Named to the Class of 1957 Career Development Chair
1993	National Science Foundation Young Investigator Award
1994	Named Institute Fellow, KISS Institute for Practical Robotics
1995	Ruth and Joel Spira Teaching Award
1997-1998, 1998-1999	Mary Ingraham Bunting Fellow Radcliffe College
1998	W. Ross Ashby Memorial Lecture International Federation for Systems Research
1998	Keynote Speaker Consortium for Computing in Small Colleges Northeastern Conference
1998	Invited Attendee Tenth Annual Symposium on the Frontiers of Science National Academy of Sciences
2000	Keynote Speaker International Conference on Innovation and Technology in Computer Science Education *[ITICSE]*
2003	Plenary Speaker Conference on Knowledge Intensive Multi-Agent Systems *[KIMAS]*
2004	Named BBS Associate Member *Behavioral and Brain Sciences*

2005 Elected Senior Member
Institute of Electrical and Electronic Engineers *[IEEE]*

2005 Invited Participant
Senior Women Leadership Workshop
Radcliffe Institute for Advanced Study
and the Anita Borg Institute for Women in Technology
Cambridge, MA

2005 Invited Speaker
International Conference on Women in Engineering and Science
Education and Ethics Track

2006 Keynote Speaker
Consortium for Computing in Small Colleges
Northeastern Conference

2006 Invited Participant
TechLeaders: Managing Change
Workshop for Senior Women
IBM and the Anita Borg Institute for Women in Technology
Yorktown Heights, New York

2008 Invited Participant
Project-Centered Learning Symposium
Cambridge-MIT Institute

2008-2015 Distinguished Lecturer
Association for Computing Machinery (ACM)

2008 Invited Participant
Google Faculty Summit
Google

2009 Invited Participant
App Inventor for Android Project
Google

2009 Invited Participant
Academic Change Leaders Summit
Center for the Advancement of Scholarship on Engineering Education

2009 Invited Participant
Health.IT Summit
Countway Library, Harvard Medical School

2010 Distinguished Lecturer
Charlotte Visualization Center
University of North Carolina at Charlotte

2010 Keynote Speaker
11th ACIS International Conference on Software Engineering, Artificial Intelligence, Networking, and Parallel/Distributed Computing *[SNPD]*

2010 Faculty Representative, Olin College
Education for Innovation: A Digital Town Hall
The Innovation Economy, the Aspen Institute, PBS NewsHour, Intel Corporation and the Information Technology & Innovation Foundation (ITIF)

2011 Invited Participant and Breakout Session Leader
National BioInnovation Safe Haven Summit
Washington DC

2011 Second Place, Best Paper Award
First-Year Programs Division
American Society for Engineering Education (ASEE) Conference

2013 Invited Attendee
CGI America/STEM Education Working Group
Clinton Global Initiative

2013 Helen Plants Award
(for best special session at *FIE 2012*; with Caitrin Lynch)
American Society for Engineering Education

2014 Invited Attendee
Roundtable discussion on "Hype vs. Reality: A.I./Robotics and impact on employability"
United States Council for International Business

2015 Invited Attendee
Engineering Design and Practices Roundtable
Museum of Science, Boston
National Center for Technological Literacy

2015 Keynote Speaker
Ohio Celebration of Women in Computing

Advisory Boards and Advisory Workshops

1996 Member
Working Group on Computer Science Education
ACM Workshop on Strategic Directions in Computing Research

1998 Advisory Committee
G-d and Computers: Identity, Formation, Dignity
AI Laboratory and Department of EECS
Massachusetts Institute of Technology

2003 External Reviewer
Informatics Teaching Programme
Edinburgh University

2004 Invited Participant
Workshop on the Future of Mobile Software and Multimedia
Nokia Research Center
Båtvik, Finland

2005 Invited Workshop Participant/Invited Speaker
Integrative Computing Education & Research (ICER): Preparing IT Graduates for 2010 and Beyond
Northeast Workshop
Computer and Information Science and Engineering Directorate (CISE)
National Science Foundation

2007-2012 Advisory Board
Active Learning for Transformation of the Undergraduate Experience (NSF CPATH project)
Department of Computer Science and Engineering
Washington University at St. Louis

2007-2010 Advisory Board
Performamatics Program Development (NSF CPATH project)
Department of Computer Science
University of Massachusetts at Lowell

2007-2011 Advisory Board
Machine Learning Experiences in Artificial Intelligence (NSF CCLI project)
Departments of Computer Science
University of Hartford and Central Connecticut State University

2007-2008 Advisory Panel Member
Bernard M. Gordon-MIT Engineering Leadership Program
Massachusetts Institute of Technology

2008 Invited Workshop Participant
Workshop on Cyber-infrastructure and Engineering Education
National Science Foundation

2008 Participant
Workshop on Programming Languages Education
Special Interest Group on Programming Languages
Association for Computing Machinery [ACM SIGPLAN]

2009 Advisor/Invited Attendee
Curriculum Workshop on the Sciences, Mathematics, and Engineering
Aga Khan University-Faculty of Arts and Sciences

2009-2013 Advisory Group
AP Computer Science *CS Principles*
The College Board

2011-*present* Advisory Board
Information Technology and Web Science Program
Rensselaer Polytechnic Institute

2011-*present* Advisory Board
Engineering Science SB Program
School of Engineering and Applied Sciences
Harvard University

Chair, 2014-*present*

2012 Invited Participant and Symposium Speaker
Value-driven Engineering: A National Conference on Medical Innovation and U.S. Global Competitiveness
Akron, Ohio

2012 Invited Participant
Symposium on Innovation to Drive Productivity in Postsecondary Education
United States Department of Education and the White House Office of Science and Technology Policy
Washington DC

2013 Curriculum Advisory Panel
IT University Innopolis
Kazan, Russia

2013 Engineer 2030 Advisor
Universidad de Chile Faculty of Science, Physics, and Mathematics
Santiago, Chile

2015-2016 Advisory Board
Center for the Advancement of Teaching and Learning
St. Paul's School
Concord, New Hampshire

2015 Strategic Review
School of Engineering and Applied Sciences
Princeton University
Princeton, New Jersey

2015 Academic Program Review
Department of Computer Science
University of San Francisco
San Francisco, California

2015 Panelist
Design for Learning
Lesley University
Cambridge, Massachusetts

2016 External Member/Advisor
Chair Search
Digital and Computational Studies
Bates College

Service

Service to the Profession

1991 Program Committee
National Conference on Artificial Intelligence
[AAAI]

1991 Workshop Committee
AAAI Fall Symposium on Hybrid Reasoning

1992 Program Committee
National Conference on Artificial Intelligence
[AAAI]

1992 Program Committee
International Conference on AI Planning Systems
[AIPS]

1992-1994 Co-Chair
American Association for Artificial Intelligence
Standing Committee on the Symposium Series

1992 Program Committee
International Conference on Knowledge Representation and Reasoning
[KR]

1993 Program Committee
International Joint Conference on Artificial Intelligence
[IJCAI]

1994 Program Committee
Workshop on Temporal Representation and Reasoning
[TIME-94]

1994 Program Committee
International Conference on Knowledge Representation and Reasoning
[KR]

1994 Program Committee
International Conference on AI Planning Systems
[AIPS]

1994 Program Committee
National Conference on Artificial Intelligence
[AAAI]

1994 Program Committee
ACM SIGPLAN Conference on Object Oriented Systems, Languages, and Applications
[OOPSLA]

1994-1996 Chair
American Association for Artificial Intelligence
Standing Committee on the Symposium Series

1995-1998 Executive Councilor
American Association for Artificial Intelligence

1996 Program Committee
International Conference on Simulation of Adaptive Behavior
[SAB]

1997 Co-Organizer, Session on Engineering Complex Systems
International Conference on Complex Systems

1997 Mentor, Educator's Symposium
ACM SIGPLAN Conference on Object Oriented Systems, Languages, and Applications
[OOPSLA]

1998 Program Committee
International Conference on Simulation of Adaptive Behavior
[SAB]

1998 Steering Committee
International Association of Science and Technology for Development (IASTED)
International Conference on Software Engineering

1998-2001 Review Committee
ACM/IEEE CS Computing Curriculum 2001
Also Member Focus Group on the First Year

1999 Senior Program Committee
National Conference on Artificial Intelligence
[AAAI]

1999- 2013 Associate Editor, Intelligent Systems
Computer Science and Information Management

1999 Programme Committee
The South African Institute of Computer Scientists and Information Technologists Annual Conference
[SAICSIT'99: Prepare for the New Millennium]

1999– 2002 CRA Summit of Women in Computing Leaders
AAAI Representative

2000 Senior Program Committee
National Conference on Artificial Intelligence
[AAAI]

2000– 2013 Associate Editor
International Journal of Computer & Information Science

2000 Editor,
DAML-ONT Initial Release
DARPA Agent Markup Language Program

2000- 2004 Member
Joint US/EU ad hoc Agent Markup Language Committee *[DAML-JC]*

2000- 2004 Invited Expert
Web Ontology Working Group
World Wide Web Consortium

2001 Program Committee
European Conference on Artificial Life
[ECAL]

2001 Chair
AAAI Spring Symposium on Robotics and Education

2002 Program Committee
International Conference on the Semantic Web
[ISWC]

2002 Program Committee
AAAI Doctoral Consortium 2002

2003 Program Committee
Frontiers in Education 2003 *[FIE]*

2003 Program Committee
World Wide Web Conference
Semantic Web Track *[WWW]*

2003 Reviewer
Computer Science: Reflections on the Field/Reflections from the Field
A report of the Computer Science and Telecommunications Board
National Research Council, National Academies

2004 Program Committee
International Conference on the Semantic Web
[ISWC]

2004-2007 Member Services Board
Association for Computing Machinery *[ACM]*

2004-2005 Program Committee
Foundations of Interactive Computing
[FinCo]

2005 Member
Association for Computing Machinery *[ACM]*
Task Force on the Profession

2005 Program Committee
International Conference on the Semantic Web
[ISWC]

2005 Study Section Participant
BioData Management and Analysis
National Institutes of Health

2005-2006 Association for Computing Machinery *[ACM]*
Student Advisory Committee (Member Services Board Liaison)

2006 Co-Chair, Student Abstract Track
National Conference on Artificial Intelligence
[AAAI]

2006 Study Section Participant
BioData Management and Analysis
National Institutes of Health

2006 Program Committee
Special Track on AI and the Web
National Conference on Artificial Intelligence
[AAAI]

2006 Program Committee
International Conference on the Semantic Web
[ISWC]

2007 Study Section Participant
BioData Management and Analysis
National Institutes of Health

2007 Program Committee
Special Track on AI and the Web
National Conference on Artificial Intelligence
[AAAI]

2007 Member
Outstanding Undergraduate Award Committee
Computing Research Association (CRA)

2008 Program Committee
Special Track on Research on Robotics in STEM Education
Global Conference on Educational Robotics
[GCER]

2008 Program Committee
Symposium on Artificial Intelligence Education
National Conference on Artificial Intelligence
[AAAI]

2008 Evaluator
European Commission
Information Society and Media Directorate-General
Cognitive Systems and Robotics

2008 Member
Outstanding Undergraduate Award Committee
Computing Research Association (CRA)

2008-2009 Program Committee and Education Committee
Summit on the National Academy of Engineering Grand Challenges
Raleigh, North Carolina
(jointly organized by Duke University, Olin College,
and the University of Southern California)

2009 Program Committee
Semantics for the Rest of Us – Variants of RDF and OWL in the Real World
Workshop at the 18th International World Wide Web Conference *[WWW 09]*

2009-2015 National Steering Committee
NAE Grand Challenge Scholars Program
(also Olin College liaison 2009)

2009 Evaluator
Cognitive Systems and Robotics
Information Society and Media Directorate-General
European Commission

2009-2010 Program Committee
Computing Research Association Biennial Conference
[Snowbird]

2010 Program Chair / Organizing Committee Chair
Summit on the Educational Imperatives of the Global Grand Challenges
NAE Grand Challenge Regional Summit Series
Wellesley, Massachusetts

2010 Workshop Chair
Workshop on Building a National Network of Grand Challenge Scholars Programs
Needham, Massachusetts

2010 Organizer
Extraordinary Stories Student Award
Grand Challenge Program/Boston Area Summit

2010 Evaluator
Cognitive Systems and Robotics
Information Society and Media Directorate-General
European Commission

2010-2011 Member
Education Committee *[CRA-E]*
Computing Research Association

2011-2013 Special Awards Judge (ACM Award)
Intel Science and Engineering Fair
(Committee Chair and member of the ACM Awards Committee, 2013)

2011 Workshop Committee
NAE Grand Challenge Scholars Program Workshop 2011
Austin, Texas

2012 Evaluator
Cognitive Systems and Robotics
Information Society and Media Directorate-General
European Commission

2013 Evaluator
Cognitive Systems and Robotics
Information Society and Media Directorate-General
European Commission

2015 Judge
Harvard i-Lab President's Challenge
Harvard University

2016 Panelist/Mentor
Career Mentoring Workshops
Computing Research Association/CRA-W

2017 Panelist/Mentor
Career Mentoring Workshops (pre-*SIGCSE*)
Computing Research Association/CRA-W

Service to the University and to the Department

Department of Computer Science
Brown University

1987	Orientation Committee
1987-1988	Student Representative, Graduate Committee
1987-1988	Coordinator, Comprehensive Examinations
1987-1989	Faculty Search Committee 1989 Student Coordinator
1989	Graduate Admissions Committee

Department of Electrical Engineering and Computer Science
Massachusetts Institute of Technology

1991-2000	Undergraduate Counselor
1991-1994	Department Head's Advisory Committee
1993-1994	*Ad Hoc* Committee on the Enrollment of Women
1994-2000	Area II (Computer Science) Graduate Committee
1994-1995	Core Curriculum Committee
1995, 1997	Graduate Admissions Committee
1996-1998	Professional Education Policy Committee
1996-2000	VI-A Professional Internship Program Faculty Advisor Lotus Development Corporation

Service to the Institute
Massachusetts Institute of Technology

1993-1994 1996-1997	Freshman Advisor
1996-1998	Institute Advisor's Council
1997	Peter J. Eloranta Summer Research Fellowship Committee

Franklin W. Olin College of Engineering
Development of the Institution

2000-2002 Residence Life Committee

2000-2002 Spiritual Life Committee

2000-2002 Furniture Programming Committee
- Faculty Representative
- Seminar Space Committee (Chair)
- Classroom Committee
- Laboratory Committee

2000-2007 Academic Program Development Committees
- Crosscut Team (2001-2002)
- Writing (2001-2003)
- Grading Task Group (2002)
- Advising Task Group (Chair) (2002)
- Reflective Essay Assessment (Co-Chair) (2002)
- Babson/Brandeis/Olin/Wellesley (2002)
- Away Experience (2002)
- Years 3 & 4 (Convener, 2002)
- Sophomore Design Project Planning Group (2003)
- Gates (Institutional Assessment) Summer Study (2003)
- Competencies Summer Study (2004)
- Arts, Humanities, Social Sciences Capstone Planning Group (2004-2005)
- Years 2 & 3 Task Force (2007)

2001-2002 Olin Partner Year Scheduling Task Force

2001 Faculty Liaison, Virtual Olin Partner Program

2003 IT Portal Committee

2009 *Ad Hoc* Committee on Curricular Innovation (Chair)

2011 Olin Lead, Olin/Stanford Partnership

2011 *Ad Hoc* Committee (Chair) – Dean's special initiative

2011 Member, Exploratory Mission, INSPER, Sao Paulo, Brazil

2014-2015 *Ad Hoc* Task Force on the Collaboratory (*ex officio*)

Franklin W. Olin College of Engineering
Standing Committees

2000, 2001	Benefits Committee
2000-2001 2002-2004	Book Program Committee
2000-2015	Faculty Search Committees Computer Science (Chair, 2001 and 2003) Arts, Humanities, and Social Sciences (2001, 2004, 2009) Materials Science (2003) Design (2005) Computer Science Visitor (2004-2009, 2011, 2012, 2015) Computing; Engineering Entrepreneurship (2013) General Member (2014) Chair (2015)
2001-2004, 2015- *present*	Undergraduate Admission Reader Member of the Admission Committee Admission Team Leader (2002-2004)
2001- *present*	Undergraduate Advisor
2001- *present*	Computer Science Group
2001- *present*	Arts, Humanities, and Social Sciences Committee
2003- *present*	Engineering Program Group (Chair, 2008-*present*)
2003- *present*	Design Group
2004-2005	Facilities Committee
2004-2007	Academic Recommendation Board
2005-2007	Faculty Information Technology Committee
2007, 2009- *present*	Reappointment and Promotion Committee
2007	Institutional Review Board (Alternate)
2007	Commencement Marshal

2007-2009 Olin Foundry (student business incubator)
Advisory Board Member

2008-2009 Committee on Curricular Effectiveness

2008-2010 President's Internal Advisory Committee (Chair)

2009-2010 Budget and Resource Planning Committee

2009-2016 Founding Director, Initiative for Innovation in Engineering Education
(Renamed the Collaboratory in 2013)

2010-2016 Member, Deans Council

2012-2016 Associate Dean, External Engagement and Initiatives
(renamed Associate Dean and Director of the Collaboratory, 2013-2015)

2012-2016 President's Cabinet

2013-2015 Charles M. Vest NAE Grand Challenge International Scholars Program
Olin College Lead

2016-*present* Special Advisor to the Provost

Harvard University (as Visiting Professor/Visiting Scholar 2007-2008)

2007-2008 Committee on Activity Based Learning
Faculty of Arts and Sciences

2007-2008 Board of Freshman Advisers

2007 Pedagogy Peer Mentoring Program
School of Engineering and Applied Sciences
Founder / Leader

2008 Design Working Group
School of Engineering and Applied Sciences

Babson College (as President's Visiting Scholar 2008-2010)

2009-2010 Planning Group for Babson Faculty Development Program

Publications

A list of non-co-authored publications of my students is also available.

1. Books

1. Stein, L. A., *Introduction to Interactive Programming*. At http://www.cs101.org/ipij.

2. Papers in Refereed Journals

1. Stein, L. A., "An Atemporal Frame Problem," *International Journal of Expert Systems* ***3****(4)*:371-381, 1990. Reprinted in *Advances in Human and Machine Cognition, Volume 1: Reasoning Agents in a Dynamic World: The Frame Problem*, K. M. Ford and P. J. Hayes, eds., (Greenwich, Connecticut: JAI Press, 1991), pp. 219-230.
2. Stein, L. A., "Resolving Ambiguity in Nonmonotonic Inheritance Hierarchies," *Artificial Intelligence* ***55*** *(2-3)*:259-310, June 1992. Earlier version appears as MIT AI Lab Memo *1316*, August 1991.
3. Boddy, M., R. P. Goldman, K. Kanazawa, and L. A. Stein, "A Critical Examination of Model-Preference Defaults," *Fundamental Informaticae* ***21*** *(1-2)*, July-August 1994.
4. Stein, L. A., "Philosophy as Engineering," Invited Commentary, *Computational Intelligence* ***10*** *(2)*, 99-102, February 1994.
5. Stein, L. A., "Intelligence and Reason: A Response to Etzioni," Letter to the Editor, *AI Magazine* ***15*** *(2)*, 11-12, Summer 1994.
6. Stein, L. A. and L. Morgenstern, "Motivated Action Theory: A Formal Theory of Causal Reasoning," *Artificial Intelligence* ***71*** *(1)*:1-42, November 1994. Earlier versions appear as MIT AI Lab Memo *1338*, December 1991; and as Brown University Technical Report *CS-89-12*, March 1989.
7. Brooks, R. A., and L. A. Stein, "Building Brains for Bodies," *Autonomous Robotics* ***1*** *(1)*: 7-25, 1994. Also appears as "Humanoid Project: Building Brains for Bodies," T. Gomi, trans., in *Near Future of Artificial Life*, T. Shibata and T. Fukuda, eds., Jiji-Tsuchin Publishers, 1994 (in Japanese).
8. Stein, L. A., "Imagination and Situated Cognition," *Journal of Experimental and Theoretical Artificial Intelligence* ***6***:393-407, 1994. Reprinted in *Android Epistemology*, K. M. Ford, C. Glymour, and P. J. Hayes, eds., AAAI Press/The MIT Press, 1995, pp. 167-182. Earlier version appears as MIT AI Lab Memo *1277*, February 1991.
9. Stein, L. A., "Science and Engineering in Knowledge Representation and Reasoning," *AI Magazine* ***17*** *(4)*:77-83, Winter 1996.
10. Stein, L. A., "Interactive Programming: Revolutionizing Introductory Computer Science," *Computing Surveys* ***28*** *(4),* December 1996.
11. Stein, L. A., "Eye of the Beholder," *IEEE Expert*, ***12*** *(3)*:5,4, May-June 1997.
12. Stein, L. A., "Post-Modular Systems: Architectural Principles for Cognitive Robotics," *Cybernetics and Systems* ***28*** *(6)*:471-487, September 1997.
13. Stein, L. A., "Rethinking CS101: Or, How Robots Revolutionize Introductory Computer Programming," accepted for publication in *Computer Science Education*.
14. Stein, L. A. and S. B. Zdonik, "Clovers: The Dynamic Behavior of Types and Instances," *International Journal of Computer Science and Information Management* ***1*** *(3)*:1-11, 1998.
15. Stein, L. A., "What We Swept Under the Rug: Radically Rethinking CS1," *Computer Science Education* ***8*** *(2)*:118-129, 1999.

16. Stein, L. A., "Challenging the Computational Metaphor: Implications for How We Think," *Cybernetics and Systems* ***30*** *(6):*473-507, 1999.
17. Bryson, J., D. Martin, S. McIlraith, and L.A. Stein. "Toward Behavioral Intelligence in the Semantic Web." *IEEE Computer* ***35*** *(11)*:48-54. 2002.
18. McGuinness, Deborah L., Richard Fikes, James Hendler and Lynn Andrea Stein. "DAML+OIL: An Ontology Language for the Semantic Web" *IEEE Intelligent Systems* ***17****(5)*:72-80, September/October 2002.
19. Stein, L.A. "If Emulation is Representation, Does Detail Matter?" *Behavioral and Brain Sciences* **27** (3):417, 2004.
20. Somerville, M., D. Anderson, H. Berbeco, J. R. Bourne, J. Crisman, D. Dabby, H. Donis-Keller, S. S. Holt, S. Kerns, D. V. Kerns, Jr., R. Martello, R.K. Miller, M. Moody, G. Pratt, J.C. Pratt, C. Shea, S. Schiffman, S. Spence, L.A. Stein, J.D. Stolk, B.D. Storey, B. Tilley, B. Vandiver, and Y. Zastavker. "The Olin Curriculum: Thinking Toward the Future." *IEEE Transactions on Education* **48** (1):198-205, February 2005.
21. Isbell, C.L., L.A. Stein, R. Cutler, J. Forbes, L. Fraser, J. Impagliazzo, V. Proulx, S. Russ, R. Thomas, and Y. Xu. "(Re)defining Computing Curricula by (Re)defining Computing." *Inroads – ACM SIGCSE Bulletin* **41** (4):195-207 December 2009.
22. Stein, L.A. "Casting a Wider Net" (Review of Mung Chiang's *Networked Life: 20 Questions and Answers*). *Science* **338**:1422-1423. 14 December 2012.

3. Proceedings of Refereed Conferences

1. Stein, L. A., "Delegation is Inheritance," *Proceedings of the Conference on Object Oriented Programming Systems, Languages, and Applications*, Orlando, Florida, October 1987, pp. 138-146. Best Paper Award Nominee/Honorable Mention. Also appears as Brown University Technical Report *CS-87-15*, July 1987.
2. Lieberman, H., L. A. Stein, and D. Ungar, "Of Types and Prototypes: The Treaty of Orlando," SIGPLAN Notices *23:5*, May 1988, pp. 43-44.
3. Stein, L. A., "Understanding Why Things Go Wrong: Towards a Theory of Explanation and Plan Recognition," *AAAI Workshop on Plan Recognition*, St. Paul, Minnesota, August 1988.
4. Morgenstern, L. and L. A. Stein, "Why Things Go Wrong: A Formal Theory of Causal Reasoning," *Proceedings of the Seventh National Conference on Artificial Intelligence*, St. Paul, Minnesota, August 1988, pp. 518-523. Reprinted in *Readings in Planning*, J. Allen, J. Hendler, and A. Tate, eds., Morgan Kaufmann, 1990.
5. Stein, L. A., "Skeptical Inheritance: Computing the Intersection of Credulous Extensions," *Proceedings of the Eleventh International Joint Conference on Artificial Intelligence*, Detroit, Michigan, August 1989, pp. 1153-1158. Earlier versions appear in *Proceedings of the Workshop on Inheritance Hierarchies in Knowledge Representation and Programming Languages*, Viareggio, Italy, February 1989; and as Brown University Technical Report *CS-89-14*, March 1989.
6. Stein, L. A., "A Preference-Based Approach to Inheritance," *Proceedings of the Third International Workshop on Nonmonotonic Reasoning*, Lake Tahoe, California, May 1990, pp. 233-246.
7. Boddy, M., R. P. Goldman, K. Kanazawa, and L. A. Stein, "Investigations of Model-Preference Defaults," *Proceedings of the Fourth International Workshop on Nonmonotonic*

Reasoning, Plymouth, Vermont, May 1992, pp. 41-51. Earlier version appears as Brown University Technical Report *CS-89-13*, March 1989.

8. Yanco, H., and L. A. Stein, "An Adaptive Communication Protocol for Cooperating Mobile Robots," *From Animals to Animats: Proceedings of the Second International Conference on the Simulation of Adaptive Behavior*, J.-A. Meyer, H. L. Roitblat and S. W. Wilson, eds., The MIT Press/Bradford Books, 1993, pp. 478-485. Also appears as MIT AI Lab Memo *1379*, November 1992.
9. Brooks, R. A., and L. A. Stein, "Building Brains for Bodies," *AIAA/NASA Conference on Intelligent Robots for Field, Factory, Service, and Space*, Houston, Texas, March 1994. Extended version appears as MIT AI Lab Memo *1439*, August 1993.
10. Horswill, I. D., and L. A. Stein, "Life after Planning and Reaction," *AAAI Fall Symposium on the Control of Intelligent Systems*, New Orleans, Louisiana, November 1994.
11. Stein, L. A., "Neo-Modular Systems: Architectural Principles for Cognitive Robotics," *AAAI Fall Symposium on Embodied Cognition*, Cambridge, Massachusetts, November 1996.
12. Stein, L. A., "Beyond Objects," Educator's Symposium, *Conference on Object Oriented Programming Systems, Languages, and Applications*, Atlanta, Georgia, October 1997.
13. Spertus, E. R., and L. A. Stein, "Mining the Web's Hyperlinks for Recommendations," *AAAI Workshop on Recommender Systems*, Madison, Wisconsin, July 1998.
14. Spertus, E. R., and L. A. Stein, "Just-In-Time Databases and the World-Wide Web," *Conference on Information and Knowledge Management*, Washington, DC, November 1998, pp. 30-37.
15. Spertus, E. R., and L. A. Stein, "A Hyperlink-Based Recommender System Written in Squeal," *Workshop on Web Information and Data Management/*, Washington, DC, November 1998.
16. Spertus, E. R., and L. A. Stein, "A Relational Database Interface to the World-Wide Web," *Fourth ACM Conference on Digital Libraries*, Berkeley, California, August 1999, pp. 248-249.
17. Adar, E., D. R. Karger, and L. A. Stein, "Haystack: Per-User Information Environments," *Conference on Information and Knowledge Management*, Kansas City, Missouri, November 1999, pp. 413-422.
18. Spertus, E. R., and L. A. Stein, "Squeal: A Structured Query Language for the Web," *Ninth International World Wide Web Conference*, Amsterdam, The Netherlands, May 2000.
19. Bryson, J., and L. A. Stein, "Architectures and Idioms: Making Progress in Agent Design," *Seventh International Workshop on Agent Theories, Architectures, and Languages*, Boston, Massachusetts, July 2000.
20. Bryson, J., and L. A. Stein, "Modularity and Specialized Learning: Mapping Between Agent Architectures and Brain Organization," *Emernet 2000: Second International Workshop on Emergent Neural Computational Architectures Based on Neuroscience*, Durham, United Kingdom, August 2000.
21. Bryson, J., and L. A. Stein, "Modularity and Specialized Learning in the Organization of Behavior," *Neural Computation and Psychology Workshop*, Liège, France, August 2000.
22. Bryson, J., W. Lowe, and L. A. Stein, "Hypothesis Testing for Complex Agents," *NIST Workshop on Performance Metrics for Intelligent Systems,* Washington DC, August 2000.
23. Bryson, J., and L. A. Stein, "Modularity and Design in Reactive Intelligence," *Proceedings of the Seventeenth International Joint Conference on Artificial Intelligence*, Seattle, Washington, August 2001.

24. Stein, L. A., "Educating Engineers to Solve Society's Problems: Extended Abstract," *International Conference on Women in Engineering and Science*, August 2005, Seoul, Korea.
25. Somerville, M., D. Chachra, J. Chambers, E. Cooney, K. Dorsey, J. B. Geddes, G. Pratt, K. Rivard, A. Schaffner, L. A. Stein, J. Stolk, S. Westwood, and Y. Zastavker, "Work in Progress – A Provisional Competency Assessment System," *Frontiers in Education*, Indianapolis, Indiana, October 2005.
26. Downey, A. B., and L. A. Stein, "A Small Footprint Curriculum for Computing," *Frontiers in Education*, San Diego, California, October 2006.
27. Somerville, M., L. A. Stein, J. Stolk, and D. Chachra, "Developing Heuristics for Curriculum Design (session abstract)," *Frontiers in Education*, San Antonio, Texas, October 2009.
28. Somerville, M., and L. A. Stein, "Engaging Students in Visual Thinking (session abstract)," *Workshop on Active Learning in Engineering Education*, Santiago, Chile, January 2011.
29. Zastavker, Y.V., D. Chachra, L. A. Stein, A. Sieminski, and C. Lynch, "Who You Are Is What You Teach: Gender, Micromessaging, and Engineering Education (session abstract)," *Workshop on Active Learning in Engineering Education*, Santiago, Chile, January 2011.
30. Zastavker, Y.V., D. Chachra, C. Lynch, A. Sieminski, and L. A. Stein, "Gender Schemas, Privilege, Micro-messaging, and Engineering Education: Practical Lessons from Theory," *American Society for Engineering Education*, Vancouver, British Columbia, June 2011. Second Place Best Paper Award, First-Year Program Division.
31. Lynch, C. and L. A. Stein, "Connecting with Community: Empathy, Experience, and Engineering with Elders," *Workshop on Active Learning in Engineering Education*, Copenhagen, Denmark, June 2012.
32. Chachra, D., L. A. Stein, A. L. Sarang-Sieminski, C. Lynch, and Y. V. Zastavker, "Special Session: An Interactive Exploration of Gender and Engineering: Unpacking the Experience (active poster abstract)," *Workshop on Active Learning in Engineering Education*, Copenhagen, Denmark, June 2012.
33. Stein, L. A., and C. Lynch, "Building Bridges in Our Backyards: Engineering, Service Learning, and Our Elder Neighbors," Work in Progress Paper, *Frontiers In Education*, Seattle, Washington, October 2012.
34. Chachra, D., L. A. Stein, A. L. Sarang-Sieminski, C. Lynch, and Y. V. Zastavker, "Special Session: An Interactive Exploration of Gender and Engineering: Unpacking the Experience (session abstract)," *Frontiers In Education*, Seattle, Washington, October 2012.
35. Stein, L. A., and C. Lynch, "Connecting with Community: Empathy, Experience, and Engineering with Elders (session abstract)," *Frontiers In Education*, Seattle, Washington, October 2012. Helen Plants Award (*American Society for Engineering Education*) for best special session at the conference.
36. Lynch, C., and L. A. Stein, "Empathy, Experience, and Engineering with Elders: Simulating Disability in the Classroom," paper presented at the annual meeting of the *American Anthropological Association*, San Francisco, California, November 2012.
37. Stein, L. A., "Catalyzing & Sustaining Change in Computing Education (Workshop Abstract)," *ACM Symposium on Computer Science Education (SIGCSE),* Denver, Colorado, March 2013
38. Stein, L. A., D. Chachra, Y. V. Zastavker, C. Lynch, and A. L. Sarang-Sieminski. "An Interactive Exploration of Gender and Computing: Unpacking the Student Experience,"

special session at *ACM Symposium on Computer Science Education (SIGCSE),* Denver, Colorado, March 2013.

39. Aragon, D. C., P. Golding, R. V. Gonzalez, G. Moreno Jr., D. Natera, R. F. O'Brien, R. T. Schoephoerster, S. A. Starks, E. Q. Villa, W. S. Walker, I. N. Webb, V. P. Manno, R. K. Miller, R. Martello, M. Somerville, L. A. Stein, J. D. Stolk, J. Townsend, "Model Collaboration for Advancing Student-Centered Engineering Education," *Frontiers In Education*, Oklahoma City, Oklahoma, October 2013.
40. Stein, L. A., "Catalyzing & Sustaining Change in Computing Education," *Australasian Computing Education Conference*, Auckland, New Zealand, January 2014.
41. Stein, L. A., D. Chachra, C. Lynch, A. Sarang-Sieminski, Y. V. Zastavker, "Gender and Computing: An Interactive Exploration of Student Experience," *Australasian Women in Computing*, Auckland, New Zealand, January 2014.
42. Stein, L. A., and C. Lynch, "Service Learning by Engaging Older Adults: The Impacts of 'Engineering for Humanity' on Elders and Students," New Models for Connecting Communities and Classrooms in Lifespan Education | Innovations in Geriatric and Public Health Education: Linking Education to Improving Practice Track, *Association for Gerontology in Higher Education's 40th Annual Meeting and Educational Leadership Conference*, Denver, Colorado, February 2014.
43. Lynch, C., and L. A. Stein, "Connecting with Community: Empathy, Experience, and Engineering with Elders (Workshop), "New Models for Connecting Communities and Classrooms in Lifespan Education | Innovations in Geriatric and Public Health Education: Linking Education to Improving Practice Track, *Association for Gerontology in Higher Education's 40th Annual Meeting and Educational Leadership Conference*, Denver, Colorado, February 2014.
44. Stein, L. A., D. Chachra, C. Lynch, Y. V. Zastavker, and A. L. Sarang-Sieminski, "Rendering Visible: Gender and Student Experience at Olin College," *Workshop on Perspectives on Gender and Product Design: Are we living in a 'man-made' world?* at *ACM CHI 2014: International Conference on Human Factors in Computing Systems*, Toronto, Ontario, Canada, April 2014.
45. Stein, L. A., D. Aragon, D. Moreno, and J. Goodman, "Evidence for the Persistent Effects of an Intervention to Mitigate Gender-Stereotypical Task Allocation Within Student Engineering Teams," *Frontiers In Education*, Madrid, Spain, October 2014.
46. Lynch, C., L. A. Stein, S. Grimshaw, E. Doyle, L. Camberg, and E. Ben-Ur, "The Impacts of Service Learning on Students and Community Members: Lessons from Design Projects for Older Adults," *Frontiers In Education*, Madrid, Spain, October 2014.
47. Chua, M., R. Adams, S. A. Fincher, and L. A. Stein, "How Else Do We Talk About 'Impact?': Engineering Education Change Language Beyond 'Dissemination'," Special Session, *Frontiers In Education*, Madrid, Spain, October 2014.
48. Hendren, S., C. Lynch, M. Chua, and L. A. Stein, "Designing for Atypical Bodies and Minds: Politics and Practices," *International Joint Conference on the Learner in Engineering Education (Workshop on Active Learning in Engineering Education)*, San Sebastian, Spain, July 2015.
49. Townsend, J., L. A. Stein, M. H. Somerville, and D. Chachra. "A Student-Centered Approach to Designing Teaming Experiences: Research and Practice," *International Joint Conference on the Learner in Engineering Education (International Symposium on Project Approaches in Engineering Education)*, San Sebastian, Spain, July 2015.

50. Chua, M., L. A. Stein, and R. Adams, "Unpacking the Language of 'Impact' and 'Success' in Project-Based Learning initiatives," *International Joint Conference on the Learner in Engineering Education (International Symposium on Project Approaches in Engineering Education)*, San Sebastian, Spain, July 2015.
51. Chua, M., and L. A. Stein, "Cargo Cults and Cognitive Apprenticeships: Two Approaches for Adopting Unfamiliar Curricular Cultures," **submitted** to *American Society for Engineering Education, 2017.*

4. Book Chapters

1. Stein, L. A., H. Lieberman, and D. Ungar, "A Shared View of Sharing: The Treaty of Orlando," in *Object-Oriented Concepts, Databases, and Applications*, W. Kim and F. Lochovsky, eds., A.C.M. Press, 1989, pp. 31-48. Also appears as Brown University Technical Report *CS-88-15*, October 1988.
2. Stein, L. A., "Extensions as Possible Worlds," in *Principles of Semantic Networks: Explorations in the Representation of Knowledge*, J. F. Sowa, ed., Morgan Kaufmann, 1991, pp. 267-281.
3. Stein, L. A., "Computing Skeptical Inheritance," in *Inheritance Hierarchies in Knowledge Representation and Programming Languages*, M. Lenzerini, D. Nardi, and M. Simi, eds., John Wiley and Sons, 1991, pp. 69-81.
4. Stein, L. A., "A Unified Methodology for Object-Oriented Programming," in *Inheritance Hierarchies in Knowledge Representation and Programming Languages*, M. Lenzerini, D. Nardi, and M. Simi, eds., John Wiley and Sons, 1991, pp. 211-222. Earlier versions appear in *Proceedings of the Workshop on Inheritance Hierarchies in Knowledge Representation and Programming Languages*, Viareggio, Italy, February 1989; and as Brown University Technical Report *CS-89-15*, March 1989, pp. 211-222.
5. Bryson, J. and L.A. Stein, "Modularity and Specialized Learning: Mapping Between Agent Architectures and Brain Organization," in *Emergent Neural Computational Architectures based on Neuroscience*, S. Wermter, J. Austin, and D. Willshaw, eds., Springer, Heidelberg, March 2001
6. McGuinness, D. L., R. Fikes, L. A. Stein, and J. A. Hendler, "DAML-ONT: An Ontology Language for the Semantic Web," in *Spinning the Semantic Web*, D. Fensel, J. Hendler, H. Lieberman, W. Wahlster, eds. MIT Press, 2002
7. Bryson, J., D. Martin, S. McIlraith, and L.A. Stein, "Agent-Based Composite Services in DAML-S: The Behavior-Oriented Design of an Intelligent Semantic Web," *Web Intelligence*, N. Zhong, J. Liu, and Y.Y. Yao, eds., Springer-Verlag, 2002, pp 37-58.
8. Stein, L. A., "Interaction, Computation, and Education," in *Interactive Computation: The New Paradigm*, D. Q. Goldin, S. Smolka, and P. Wegner, eds., Springer Verlag, 2006, pp. 463-484.
9. Stein, L. A., M. H. Somerville, J. Townsend, and V. P. Manno, "Olin College: Re-visioning Undergraduate Engineering Education," in *The College Curriculum: A Reader*, J DeVitis, ed. (New York: Peter Lang, 2013).

5. Other Major Publications

1. Stein, L. A., "Compound Type Expressions: Flexible Types in Object Oriented Programming," Panel Position Paper, *Proceedings of the Conference on Object Oriented*

Programming Systems, Languages, and Applications, San Diego, California, September 1988, pp. 360-361.

2. T. Adams, L. D. Braida, A. Hunter, B. Johnson, M. Jones, N. Khan ,M. Pierce, L. A. Stein, L. Tucker-Kellogg, S. Yeh, H. Abelson. *Women Undergraduate Enrollment in Electrical Engineering and Computer Science at MIT: Final Report of the EECS Women Undergraduate Enrollment Committee*. January 3, 1995. http://www-swiss.ai.mit.edu/~hal/women-enrollment-comm/final-report.html.
3. Stein, L. A., *Interactive Programming in Java*, Tutorial Notes from OOPSLA `97, Atlanta Georgia, October 1997.
4. Stein, L. A., "Why Your Computer is not an Abacus," solicited opinion piece for the *Chronicle of Higher Education*.
5. Berners-Lee, T., D. R. Karger, L. A. Stein, R. R. Swick , and D. J. Weitzner, *Semantic Web Development*, http://www.w3.org/2000/01/sw/DevelopmentProposal .
6. Stein, L. A., D. Connolly, and D. L. McGuinness, eds., *DAML-ONT Initial Release*, http://www.daml.org/2000/10/daml-ont.html .
7. Stein, L. A., D. Connolly, and D. L. McGuinness, eds., "Annotated DAML Ontology Markup," in L. A. Stein, D. Connolly, and D. L. McGuinness, eds., *DAML-ONT Initial Release*. http://www.daml.org/2000/10/daml-walkthru .
8. Stein, L. A., ed., *Working Notes of the Spring Symposium on Robotics and Education*, American Association for Artificial Intelligence, March 2001.
9. Connolly, D., I. Horrocks, F. van Harmelen, D.L. McGuinness, P.F. Patel-Schneider, and L.A. Stein, eds., *DAML+OIL (March 2001) Reference Description* W3C Note, 18 December 2001. http://www.w3.org/TR/daml+oil-reference .
10. Dean, M., G. Schreiber, S. Bechhofer, F. van Harmelen, J. Hendler, I. Horrocks, D.L. McGuinness, P.F. Patel-Schneider, L.A. Stein, *OWL Web Ontology Language 1.0 Reference* W3C Recommendation 10 February 2004 (Previously Dean, M., D. Connolly, F. van Harmelen, J. Hendler, I. Horrocks, D.L. McGuinness, P.F. Patel-Schneider, L.A. Stein, *OWL Web Ontology Language 1.0 Reference* W3C Working Draft 29 July 2002) http://www.w3.org/TR/owl-ref/.
11. Adrion, Rick, Bob Aiken, Andy Bernat, Jeffrey C. Brown, Steve Cooper, Mike Dunn, Mary Finlay, Roscoe Giles, David Gries, Charles Kelemen, Shriram Krishnamurthy, Deepak Kumar, Jim Kurose, Andrea Lawrence, Louis Masi, Dan McCracken, Susan Merritt, Tom Murtaugh, Joyce Plotkin, Jane Prey, Barbara Ryder, Ra'ad Siraj, Lynn Stein, Lixin Tao, Virginia Teller, James Thomas, Heikki Topi, Klaus Sutner, Mary Shaw, and Ursula Wolz. *Report of NSF Workshop on Integrative Computing Education and Research (Northeast Workshop)*. Cambridge, Massachusetts, November 2005/January 2006.
12. Fleming, Lee, Thomas D. Perry IV, and Lynn Andrea Stein. *Engineering a Renaissance: The Launch of the Harvard School of Engineering and Applied Sciences*, Harvard Business School Case N9-608-087, November 2007.
13. Austen BioInnovation Institute in Akron. *Value-driven Engineering for US Global Competitiveness: A Call for a National Platform to Advance Value-driven Engineering*. June 2011. http://www.abiakron.org/valuewhitepaper and http://www.abiakron.org/Data/Sites/1/pdf/abiawhitepaper6-14-11.pdf
14. Lynch, C., L. A. Stein, E. Doyle, and S. Grimshaw, "Engineering for Humanity: Partnering College Students with Senior Citizens for Healthy Aging-in-Place/Transformation of Attitudes in Older Adults" Poster at *Healthy Aging in the Commonwealth: Charting A Path Forward*, Waltham, Massachusetts, January 2014.

6. Internal Memoranda and Progress Reports (items not listed above)

1. Stein, L. A., "A Preference-Based Semantics for Inheritance," Brown University Technical Report *CS-90-08*, April 1990.
2. Stein, L. A., "Resolving Ambiguity in Nonmonotonic Reasoning," Brown University Technical Report *CS-90-18*, August 1990.
3. Stein, L. A., "Research Overview," AP Working Paper 93-1.
4. Stein, L. A., "Representation and Reasoning in Reactive Systems," AP Working Paper 93-2.
5. Stein, L. A., and J. A. Hendler, "Robotics-based Undergraduate Computer Programming Courses."
6. Brooks, R. A., J. Bryson, M. Marjanovic, L. A. Stein, and M. Wessler, "Humanoid Software."
7. Stein, L. A., "All is Foreknown, But Free Will is Given," *G-d and Computers: Minds, Machines and Metaphysics*, A. Foerst, Ed.
8. Stein, L. A., "Bodily Intentions," PNP Workshop on Intentionality and the Natural Mind.
9. Karger, D., and L. A. Stein, "Haystack", June 1996. http://www.ai.mit.edu/projects/haystack/karger-stein-9606.html
10. Stein, L. A., "Interactive Programming: Revolutionizing Introductory Computer Science," June 1996. http://www.ai.mit.edu/projects/cs101/sdcr.html
11. Stein, L. A., "A Proposal to Rethink CS101," April 1996. http://www.ai.mit.edu/projects/cs101/cd.html
12. Stein, L. A., "Architectures for Cognitive Robotics," November 1996. http://www.ai.mit.edu/projects/cognitive-robotics/nmod-prop.ps
13. Torrance, M. C., and L. A. Stein, "Communicating with Martians (and Robots)", 1997. http://www.ai.mit.edu/people/las/papers/ orrance-stein-97.ps.gz
14. Wessler, M., and L. A. Stein, "Robust Active Vision from Simple Symbiotic Subsystems", 1997. http://www.ai.mit.edu/people/las/papers/wessler-stein-97.ps.gz
15. Karger, D., and L. A. Stein, "Haystack: Per-User Information Environments," February 1997. http://www.ai.mit.edu/projects/haystack/karger-stein-9702.html
16. Stein, L. A., "Reconceptualizing Computation: Radically Rethinking CS1," September 1997. http://www.ai.mit.edu/people/las/papers/cs101-proposal.html
17. Stein, L. A., "Challenging Computation's Central Dogma," January 1998.
18. Stein, L. A., E. F. Keller, B. C. Smith, and S. Turkle, "Emerging Computation: The Multi-Disciplinary Ramifications of a Computational Paradigm Shift," May 1998.
19. Stein, L. A. , "Reconceptualizing Middleware," October 2002.
20. R. Martello, L. A. Stein and D. Magnoni, "Paul Revere Online: The Olin College Digital History Initiative", September 2003.
21. Kuhn, S., F. G. Martin and L. A. Stein, "Are Introductory Design Experiences Effective at Promoting Engagement?", December 2003.
22. D. Magnoni, R. Martello and L. A. Stein, "Leveraging Metadata for Diverse Groups in the Olin College Digital History Initiative," January 2004.
23. Stein, L.A., R. Martello and D. Magnoni, "A Digital Workbench for Social Science Research," February 2004.
24. Stein, L.A., R. Martello and D. Magnoni, "QuILL: Queryable Indexable Live Ledger: Twenty-First Century Tools for Handwritten (Social Science) Corpora," December 2004.

25. Stein, L.A., "The Semantics of the Web is Procedural," March 2006.
26. Stein, L.A., "Spreading Small Footprints," January 2007.
27. Stein, L.A., "Princeton Visit Report and Draft Recommendations," Report to the Dean of the School of Engineering and Applied Sciences, Harvard University, December 2007.
28. Howe, R., M. Seltzer, L. A. Stein, H. Stone, and W. Yang, "Design in the Engineering Curriculum," Report of the SEAS Design Working Group, Harvard University, May 2008.
29. Somerville, M., L.A. Stein and R.K. Miller, "Reaching Outside the Oval: Strategies for Catalyzing Change in Engineering Education," White Paper for the Olin President's Council Meeting, November 2008.
30. Stein, L.A., "A Case Study in the Export of an Olin Course", appendix to the Olin President's Council White Paper, November 2008
31. Lynch, C., and L.A. Stein, "Engineering for Humanity: Innovating Service Learning at Olin and BBW", February 2009.
32. Frankel, F., C.T. Silva, L.A. Stein, and R.B. Brady. "DrawBridge—Virtual Graphical Collaboration to Transform Scientific Discovery and Communication," May 2009.
33. Klappholz, A.D., R. Silva, L.A. Stein, M.C.Ceberio, O. Eljabiri, and S. Condly, "Real Projects for Real Clients Courses in High School," May 2009.
34. Stein, L.A., and the Olin Grand Challenge Scholars Planning Meeting, "Planning a Grand Challenge Scholars Program at Olin College", May 2009.
35. Stein, L.A., Somerville, M. H., and Stolk, J. D., "An Olin Initiative," May 2009.
36. Stein, L.A., "Mentoring Plan for a Computational Innovation Fellow at the Franklin W. Olin College of Engineering," May 2009.
37. Stein, L.A., W.M. Reichert, M. Absher, and L. Yates, "Developing a National Network of Grand Challenge Scholars Programs," August 2009.
38. Stein, L.A., and R. Guerriero, "Engineers into Innovators," December 2009.
39. Stein, L.A., "Final Report to Olin Subaward: *Developing Engineering Faculty as Leaders of Academic Change*", December 2009.
40. Stein, L.A., "The Grand Challenge Awards: Extraordinary Stories of Tomorrow's Innovators", December 2009.
41. Shaer, O., and L.A. Stein, "Empowering Non-Programmer Digital Natives to Craft Novel Mobile Applications," December 2009.
42. Stein, L. A., M.H. Somerville, D. Chachra, J.R. Geddes, R. Martello, C.A. Morse, J. Stolk, and Y.V. Zastavker, "Developing Life-Long Learners: Helping Faculty Bridge the Gap," January 2010.
43. Stein., L. A. "Innovation in Enginering and Computer Science Education." March 2010.
44. Chachra, D., and L.A. Stein, "Engineering Education Research: Understanding and Improving Student Experiences," August 2010.
45. Lynch, C. , and L.A. Stein, "Engineering for Humanity: A Collaboration Between Seniors and Students (Concept Paper)", August 2010.
46. Somerville, M.H., J.B. Brockman, D.E. Goldberg, B. Mikic, and L.A. Stein, "Designing for Experience: Changing Engineering Education to Foster Innovators (a preliminary sketch)," August 2010.
47. Carpenter, J.P., M.A. Absher, J.D. Nelson, and L.A. Stein, "Catalyzing Innovation and Entrepreneurship through a National Network of Grand Challenge Scholars Programs," August 2010.

48. Parsons, P., J.D. Stolk, M.H. Somerville, and L.A. Stein, "Facilities Vision for Architecture & Allied Arts," September 2010.
49. Stein, L.A. and M.H. Somerville, "To Draw or Not To Draw: Students' Use of Visual Communication in Explanations," October 2010.
50. Lynch, C., and L.A. Stein, "Engineering for Humanity: Helping Elders Age in Place through Partnerships for Healthy Living," October 2010.
51. Lynch, C., and L.A. Stein, "Engineering for Humanity: A Collaboration Between Seniors and Students," October 2010.
52. Zastavker, Y.V., D. Chachra, L.A. Stein, A. Sieminski, and C. Lynch, "Faculty and Student Construction of Gender in First-Year Engineering Programs: Gender, Micro-Messaging, and Engineering Education," January 2011.
53. Carpenter, J. P., and L.A. Stein, "Catalyzing a National Network of Grand Challenge Scholars Programs to Transform Undergraduate STEM Education," January 2011.
54. Somerville, M.H., J.B. Brockman, D.E. Goldberg, B. Mikic, and L.A. Stein, "Designing for Experience: Changing Engineering Education to Foster Innovators," January 2011.
55. Wolz, U., L. Cassel, M. Oudshourn, S. White, J. Dunne, L. A. Stein, "An Online Community for K-12 Teachers that Supports Interdisciplinary Computing," January 2012.
56. Chachra, D., Y. V. Zastavker, L. A. Stein, A. L. Sarang-Sieminski, and C. Lynch, "An Interactive Exploration of Gender and Engineering: Feedback and Development," January 2012.
57. Chachra, D., C. Lynch, A. L. Sarang-Sieminski, L. A. Stein, and Y. V. Zastavker, "An Interactive Exploration of Gender and Engineering: Unpacking the Experience," January 2012.
58. Wolz, U., J. Dunne, S. White, L. A. Stein, L. Delcambre, and L. Cassel, "Sustained Professional Development through Practice in Community," April 2012.
59. Townsend, J, L. A. Stein, and R. V. Gonzalez, "Early Development of a Collaboration Framework for Student-Centered Engineering Education," March 2014.
60. Abele, J., R. K. Miller, and L. A. Stein, "The Role of Collaboration in Spreading Culture Change in Teaching and Learning," White Paper for the Olin President's Council Meeting, May 2014.
61. Olin College Concept Paper: A Proposed Partnership between the Kern Family Foundation and Olin College of Engineering, September 2015.
62. Stein, L. A., T. Newhall, and H. M. Walker, Review of the Computer Science Department at the University of San Francisco, December 2015.

7. Invited Lectures

1. October 1987, "The Treaty of Orlando," A.C.M. Conference on Object-Oriented Systems, Languages, and Applications, Orlando, Florida.
2. March 1988, "Towards the Unification of Object Oriented Programming," Center for Integrated Systems, Stanford University, Palo Alto, California.
3. June 1988, "Why Things Go Wrong: A Formal Theory of Causal Reasoning," Department of Computer Science, Yale University, New Haven, Connecticut.
4. August 1988, "Understanding Why Things Go Wrong: Towards a Theory of Explanation and Plan Recognition," AAAI Workshop on Plan Recognition, St. Paul, Minnesota.

5. September 1988, "Finding Your Niche," Freshman Dean's Office Panel of Recent Women Graduates, Harvard and Radcliffe Colleges, Cambridge, Massachusetts.
6. September 1988, "Compound Type Expressions: Flexible Types in Object Oriented Programming," A.C.M. Conference on Object-Oriented Systems, Languages, and Applications, San Diego, California.
7. January 1989, "Skeptical Inheritance: Computing the Intersection of Credulous Extensions," Artificial Intelligence Principles Research Department, A. T. & T. Bell Laboratories, Murray Hill, New Jersey.
8. February 1989, "Skeptical Inheritance: Computing the Intersection of Credulous Extensions," Workshop on Inheritance Hierarchies in Knowledge Representation and Programming Languages, Viareggio, Italy, February 1989.
9. February 1989, "Towards a Unified Method of Sharing in Object-Oriented Programming," Workshop on Inheritance Hierarchies in Knowledge Representation and Programming Languages, Viareggio, Italy.
10. February 1989, "Credulous Extensions and Possible Worlds," Workshop on Formal Aspects of Semantic Networks, Catalina, California.
11. April 1989, "Implementability and Tractability," Workshop on Defeasible Reasoning with Specificity and Multiple Inheritance, St. Louis, Missouri.
12. May, 1989, "An Atemporal Frame Problem," First International Workshop on Human and Machine Cognition: The Frame Problem, Pensacola Beach, Florida.
13. June 1989, "Skeptical Inheritance: Computing the Intersection of Credulous Extensions," IBM T. J. Watson Research Center, Yorktown Heights, New York.
14. January 1990, "Resolving Ambiguity in Nonmonotonic Inheritance Hierarchies," Department of Computer and Information Sciences, University of Pennsylvania, Philadelphia, Pennsylvania.
15. November, 1990, "What is AI?," Association for Computing Machinery, Massachusetts Institute of Technology Student Chapter, Cambridge, Massachusetts.
16. January, 1991, "Artificial Intelligence Courses," Computer Science Curriculum Workshop, Dedham, Massachusetts.
17. January 1991, "Imagination and Situated Cognition," Artificial Intelligence Laboratory, Massachusetts Institute of Technology, Cambridge, Massachusetts.
18. February 1991, "Imagination and Situated Cognition," Department of Computer Science, Stanford University, Palo Alto, California.
19. February 1991, "Imagination and Situated Cognition," Xerox PARC, Palo Alto, California
20. April 1991, "Hands-on AI and the Classroom of Tomorrow," NECUSE Workshop on Artificial Intelligence, College of the Holy Cross, Worcester, Massachusetts.
21. May 1991, "Imagination and Situated Cognition," Second International Workshop on Human and Machine Cognition: Android Epistemology, Perdido Key, Florida.
22. December 1991, "Imagination and Situated Cognition: An Alternative Architecture for Intelligent Agents," Cognitive Science Colloquium, University of Pennsylvania, Philadelphia, Pennsylvania.
23. September 1992, "Juggling and Balance," Society of Women Engineers, Massachusetts Institute of Technology Student Chapter, Cambridge, Massachusetts.
24. September 1992, "Windows of Opportunity," Freshman Dean's Office Panel on Women and Science, Harvard and Radcliffe Colleges, Cambridge, Massachusetts.

25. November 1992, "Representation and Reactive Systems," Department of Computer Science and Engineering, Washington University, St. Louis, Missouri.
26. December 1992, "Representation and Reactive Systems," Department of Computer Science, Brown University, Providence, Rhode Island.
27. January 1993, "Representation and Reasoning for Reactive Systems," Artificial Intelligence Colloquium, University of Toronto, Toronto, Ontario, Canada.
28. March 1993, "Building Brains for Bodies," Mather House Cognitive Science Table, Harvard University, Cambridge, Massachusetts.
29. March 1993, "Reaction and Representation," University of Maryland, College Park, Maryland.
30. September 1993, "Science and Engineering in Knowledge Representation and Reasoning: A Survey of KR '93," International Joint Conference on Artificial Intelligence, Chambery, Savoie, France.
31. November 1993, "Representation and Reasoning for Reactive Systems," Naval Center for Applied Research in Artificial Intelligence, Naval Research Laboratory, Washington, D.C.
32. January 1994, "Interviewing for a UROP" and "Laboratory Organization," Pre-UROP Training Workshop on the Nuts and Bolts of Being a UROPer, Edgerton Center, Massachusetts Institute of Technology, Cambridge, Massachusetts.
33. May 1994, "Reaction and Representation," Sea Grant Program, Massachusetts Institute of Technology, Cambridge, Massachusetts.
34. May 1994, "Towards a Cognitive Robotics," School of Computer Science, Carnegie Mellon University, Pittsburgh, Pennsylvania.
35. May 1996, "Rethinking CS101: How Robotics Revolutionizes Introductory Computer Programming," Department of Electrical Engineering and Computer Science, Massachusetts Institute of Technology, Cambridge, Massachusetts.
36. May 1996, "Non-Modular Systems: Architectural Principles for Cognitive Robotics," Department of Computer Science, University of Chicago, Chicago, Illinois.
37. June 1996, "Rethinking CS101: How Robotics Revolutionizes Introductory Computer Programming," Department of Computer Science, Brown University, Providence, Rhode Island.
38. Nov 1996, "Neo-Modular Systems: Architectural Principles for Cognitive Robotics," Artificial Intelligence Center, University of Georgia, Athens, Georgia.
39. Dec 1996, "Neo-Modular Systems for Cognition," Workshop on the Origins of Cognition, San Sebastian, The Basque Country, Spain.
40. January 1997, "Active Learning: What's the Problem?" Better Teaching at MIT, Cambridge, Massachusetts.
41. April 1997, "Changing Conceptions of Computation: Pedagogic Implications", Class(es) of 1960s Scholar Lecture, Williams College, Williamstown, Massachusetts.
42. May 1997, Expert Panel on Artificial Intelligence, *Discovery News Online*, www.discovery.com.
43. July 1997, "Preaching What We Practice: How AI is Changing the Concept of Computation", invited talk at AAAI '97, Providence, Rhode Island.
44. August 1997, "Myths about Women at MIT", Chocolate Plus, MIT R/O Women's Committee, Cambridge, Massachusetts.
45. September 1997, Panel on "Careers in Engineering and Physics", Harvard/Radcliffe Science Alliance, Cambridge, Massachusetts.

46. October 1997, Panel on "Teaching OO", OOPSLA `97 Educator's Symposium, Atlanta, Georgia.
47. November 1997, "Beyond Algorithmic Computation," Symposium on the Interactive Foundations of Computation, Washington University, St. Louis, Missouri.
48. November 1997, "All is Foreknown, but Free Will is Given", *G-d and Computers: Minds, Machines and Metaphysics*, Massachusetts Institute of Technology, Cambridge, Massachusetts.
49. December 1997, "Preaching What We Practice: Radically Rethinking CS101", Computer Science Colloquium Series, Division of Engineering and Applied Science, Harvard University, Cambridge, Massachusetts.
50. January 1998, "Preaching What We Practice: Radically Rethinking CS101", Department of Computer Science and Engineering, University of Washington, Seattle, Washington.
51. February 1998, Panel on BYTE Magazine's Java Adoption Survey, Waltham, Massachusetts.
52. March 1998, "Teaching What Computing Really Is: A Curriculum for Today's Computational World," NERCOMP (New England Regional Computing Program) Annual Conference: *The Changing Face of IT*, Sturbridge, Massachusetts.
53. April 1998, "Beyond Algorithmic Computation: Challenging the Information Processing Metaphor," Mary Ingraham Bunting Institute, Radcliffe College, Cambridge, Massachusetts.
54. April 1998, "Reconceptualizing Computation," Keynote address, *Consortium for Computing in Small Colleges Third Annual Northeastern Conference*, Fairfield, Connecticut.
55. April 1998, "Challenging the Computational Metaphor: Implications for How We Think," Plenary Address, *Fourteenth European Meeting for Systems and Cybernetics Research*, Vienna, Austria.
56. September 1998, Panel on "Science of the 21st Century," Harvard/Radcliffe Science Alliance, Cambridge, Massachusetts.
57. September 1998, "The Real Computer Revolution," Mary Ingraham Bunting Institute, Radcliffe College, Cambridge, Massachusetts.
58. October 1998, "Radically Rethinking Introductory Computer Science Education," The MacArthur Chair Program on Inquiry-Based Learning in People and Machines, Hampshire College, Amherst, Massachusetts.
59. March 1999, "Challenging the Computational Metaphor: Implications for How We Think," Computer Science Department, Brandeis College, Waltham, Massachusetts.
60. March 1999, "Bodily Intentions," Intentionality and Situated Cognition, invited speaker at *Symposium on Intentionality and the Natural Mind*, a workshop sponsored by the Philosophy-Neuroscience-Psychology Program, Washington University, St. Louis, Missouri.
61. April 1999, "Cultural Revolutions in Computer Science," plenary speaker, *Workshop on Diversifying the Culture and Curriculum of Science, Engineering and Women's Studies*, Kingston, Rhode Island.
62. January 2000, "The Disappearance of Computers," SPARK Forum, Massachusetts Institute of Technology, Cambridge, Massachusetts.
63. March 2000, Panel on "Concurrency in the First Year," *ACM Symposium on Computer Science Education (SIGCSE),* Austin, Texas.

64. April 2000, "The Answer is in Interaction: Interactive Architectures for Computer Science," Department of Computer Science, Brandeis University, Waltham, Massachusetts.
65. April 2000, Panel on "The Gendered Mind: Women in Math, Engineering, Physics, and Computer Science," *National Symposium on the Advancement of Women in Science,* Cambridge, Massachusetts.
66. May 2000, "Interactive Computing Systems," *International Conference on Complex Systems,* Nashua, New Hampshire.
67. July 2000, "Radically Rethinking CS1," Keynote Lecture, *International Conference on Innovation and Technology in Computer Science Education (ITiCSE)*, Helsinki, Finland.
68. September 2000, Panel on "Expanding the Pipeline through Innovations in College-Level CS&E Curricula," Grace Murray Hopper Conference, Cape Cod, Massachusetts.
69. December 2000, "The Answer is in Interaction: Interactive Architectures for Computer Science," Department of Computer Science, Wellesley College, Wellesley, Massachusetts.
70. December 2001, "The Answer is Interaction," Faculty Seminar, Franklin W. Olin College of Engineering, Needham, Massachusetts.
71. February 2002, "Shifting the Computational Paradigm" (status briefing), DARPA DAML PI Meeting, St. Petersburg, FL.
72. October 2003, "Computation as a Community Member," plenary talk at *Knowledge Intensive Multi-Agent Computer Systems*, Cambridge, Massachusetts.
73. February 2004, "What Might Intentionality Be? A View from Computer Science," Wellesley College Cognitive Science Seminar, Wellesley, Massachusetts.
74. August 2005, "Reinventing Engineering Education: Building Olin College," Gwangju Institute of Science and Technology, Gwangju, Korea.
75. August 2005, "Electrical Engineering and Computer Science Education at Olin College," Gwangju Institute of Science and Technology, Gwangju, Korea.
76. August 2005, "Educating Engineers to Solve Society's Problems," invited talk at the *International Conference of Women in Engineering and Science*, Seoul, Korea.
77. August 2005, Panel on Information Technology, *International Conference of Women in Engineering and Science*, Seoul, Korea.
78. November 2005, "Computing in a Very Small Box," Opening Remarks at NSF/CISE Workshop on *Integrative Computing Education and Research: Preparing IT Graduates for 2010 and Beyond*, Boston, Massachusetts.
79. April 2006, "A Small Footprint Curriculum for Computing (and why on earth anyone would want such a thing)," Keynote Address, *Consortium for Computing in Small Colleges Northeastern Conference*, Worcester, Massachusetts.
80. January 2007, "The *Tablet Rasa*: Designing Computer Science Education on a Clean Slate," Computer Science Department, Union College, Schenectady, New York.
81. January 2007, "Designing Computer Science Education on a Clean Slate," Computer Science Department, Stanford University, Stanford, California.
82. April 2007, "Interaction Design: How to Build Products That Your Customers Really Use," Babson Technology Venture Group, Babson College, Wellesley, Massachusetts.
83. June 2007, Roundtable on First Year Programs, *CDIO* Conference, Massachusetts Institute of Technology, Cambridge, Massachusetts

84. October 2007, "A Small Footprint Curriculum for Computing and other Lessons Learned from the Invention of Olin College," Department of Computer Science and Engineering, Washington University, St. Louis, Missouri.
85. November 2007, "Designing a School," *Product Design: Industrial Design*, Graduate School of Design, Harvard University, Cambridge, Massachusetts.
86. December 2007, Panel on "The State of Design," *Product Design: Industrial Design*, Graduate School of Design, Harvard University, Cambridge, Massachusetts.
87. December 2007, "A Small Footprint Curriculum for Computing and other Lessons Learned from the Invention of Olin College," Department of Computer Science, University of Massachusetts, Lowell, Massachusetts.
88. January 2008, "Crafting the Learning Experience," Computer Science Colloquium, School of Engineering and Applied Sciences, Harvard University, Cambridge, Massachusetts.
89. February 2008, "The Tyranny of Content and other Lessons Learned from the Invention of Olin College," Department of Mechanical Engineering and the Center for Engineering Education Outreach, Tufts University, Medford, Massachusetts.
90. March 2008, Panel on "The Place of Project Centered Learning in the Curriculum: Early, Late, or Continuous?", Cambridge-MIT Symposium on Project Centered Learning, Cambridge, Massachusetts.
91. April, 2008, "Challenging the Computational Metaphor", ACM Worcester Chapter, Worcester, Massachusetts.
92. April, 2008, "Challenging the Computational Metaphor", ACM Chapter, Johns Hopkins University, Baltimore, Maryland.
93. July 2008, Panel on "Innovative Undergraduate Curricula", Computing Research Association Biennial Conference, Snowbird, Utah.
94. November 2008, "There's No Place Like ~~Olin~~ ~~Harvard~~ Home", Faculty Seminar, Franklin W. Olin College of Engineering, Needham, Massachusetts.
95. February 2009, "Questions to Ask When Designing Curriculum", FAS Planning Workshop on Curriculum and Teaching in Math, Science, and Engineering, Aga Khan University, Wellesley, Massachusetts.
96. April 2009, "Starting from Scratch: Curriculum and Culture" session co-leader, Olin in Action Day, Olin College, Needham, Massachusetts.
97. June 2009, "Computational Innovation at Olin", Workshop on App Inventor for Android, Google, Mountain View, California.
98. January 2010, "Post-Modular Systems," Duke University ACM Chapter, Durham, North Carolina.
99. February 2010, "To Draw or Not To Draw: Student Use of Visual Representations in Explanation," Distinguished Lecturer Series, Charlotte Visualization Center, University of North Carolina, Charlotte, North Carolina.
100. June 2010, "What Is Computing: Enabling Computationally Oriented Thinkers," 11th ACIS International Conference on Software Engineering, Artificial Intelligence, Networking, and Parallel/Distributed Computing (SNPD 2010), University of Greenwich, London, United Kingdom.
101. June 2010, Panel on Curricular Innovation, Faculty Retreat, School of Engineering and Applied Sciences, Harvard University, Cambridge, Massachusetts.

102. November 2010, "The Tyranny of Content and other Lessons Learned from the Invention of Olin College," Department of Computer Science and Engineering, Lehigh University, Bethlehem, Pennsylvania.
103. January 2011, Invited Poster on Developing a National Network of Grand Challenge Scholars Programs, NSF Course, Curriculum, and Laboratory Improvement (CCLI)/ Transforming Undergraduate Education in Science, Technology, Engineering, and Mathematics (TUES) Program Principal Investigators (PI) Conference, Washington, DC.
104. April 2011, "Learning Spaces," *Designing the Course of the Future* Graduate Seminar, Derek Bok Center for Teaching and Learning, Faculty of Arts and Sciences, Harvard University, Cambridge, Massachusetts.
105. April 2011, Panel on Teaching and Learning Initiatives, LASPAU program on Critical Issues and Strategies for Leaders of Modern Universities, Cambridge, Massachusetts.
106. June 2011, Panel on Building a National Network of Grand Challenge Scholars Program, ASEE Conference, Vancouver, British Columbia.
107. July 2011, "Creating a Culture of Student Engagement," Singapore Polytechnic, Singapore.
108. July 2011, "Designing a World-Class Education Today to Support the Global Leaders of Tomorrow: Creating Caring, Competent Citizens," a Round-Table Discussion at The Nueva School, Hillsboro, California.
109. November 2011, "Interdisciplinary Education at Olin College: Lessons Learned," Workshop on *Creating a Climate for Interdisciplinary Computing*, Washington DC.
110. February 2012, "Challenging the Computational Metaphor," Princeton Area ACM Chapter, Princeton, New Jersey.
111. February 2012, "Engaging Students as Learners: Principles, Pitfalls, and Practical Realities," Computer Science and Engineering Department, Washington University at St. Louis, St. Louis, Missouri.
112. April 2012, "Environments for Learning", *Designing the Course of the Future* Graduate Seminar, Derek Bok Center for Teaching and Learning, Faculty of Arts and Sciences, Harvard University, Cambridge, Massachusetts.
113. April 2012, Panelist, Symposium on Educating the Next Generation of Value-driven Innovators, Value-Driven Engineering: A National Conference on Medical Innovation for U.S. Global Competitiveness.
114. April 2012, "Challenging the Computational Metaphor," Department of Computer Science and Engineering, Lehigh University, Bethlehem, Pennsylvania.
115. November 2012, "La experiencia de creación de una nueva universidad de Ingeniería: Olin College of Engineering" (delivered in English with simultaneous translation), Universidad de Guanajuato, Guanajuato, Mexico.
116. November 2013, "Olin College," Alfred P. Sloan Foundation, New York, New York.
117. March 2014, Panel on Creating a Pipeline for the Next Generation of Inventors, National Academy of Inventors Third Annual Conference, Arlington, Virginia.
118. March 2014, Roundtable on "Hype vs. Reality: A.I./Robotics and impact on employability", The Center for Curriculum Redesign (CCR), the McGraw Hill Financial Global Institute and The USCIB Foundation, New York, New York.
119. April 2014, "What does it mean to be human, and what is uniquely human?" and Panel Discussion, Launch of the Honors College, University of Massachusetts at Boston, Boston, Massachusetts.

120. May 2014, "Culture, Collaboration, and Change," Olin College President's Council Meeting, Needham, Massachusetts.
121. February 2015, "Thinking about Thinking: A Talk in Four Parts", 2015 Ohio Celebration of Women in Computing (OCWiC), Huron/Sandusky, Ohio.
122. April 2016, Panel on Transformational Leadership: Rewiring Universities for Optimal Student Learning, LASPAU Leadership Program for Brazil Higher Education STHEM Consortium, Cambridge, Massachusetts.
123. October 2016, "Crafting the Learning Experience", Teaching Week Keynote, Texas A&M University, Doha, Qatar.
124. November 2016, Panel on Promotion to the Next Level, CRA-W Early Career Mentoring Workshop, Washington DC.
125. November 2016, Panel on Leading Initiatives/Building New Programs, CRA-W Mid Career Mentoring Workshop, Washington DC.

Workshop Facilitation and Leadership

July 1993 — Co-Founder and Organizer (with David P. Miller)
Robot Building Laboratory
National Conference on Artificial Intelligence

October 1997 — Tutorial Leader
Interactive Programming in Java: A Non-standard Introduction
ACM SIGPLAN Conference on Object Oriented Systems, Languages, and Applications *[OOPSLA]*
Atlanta, Georgia

September 2007 — Workshop Leader
Curricular Visioning and Student Engagement
Harvard University School of Engineering and Applied Sciences

June 2008 — Workshop Leader
Backwards Curriculum Design
Harvard University School of Engineering and Applied Sciences

July 2009 — Workshop Leader (with Mark Somerville and Jon Stolk)
Catalyzing and Sustaining Change in Engineering Education
A Regional Workshop on Transforming Engineering Education
Needham, Massachusetts

July 2009 — Working Group Leader (with Charles Isbell)
Working Group on (Re)defining Computing Curricula by (Re)defining Computing
International Conference on Innovation and Technology in Computer Science Education *[ITICSE]*

October 2009 — Special Session Leader (with Mark Somerville, Jon Stolk, and Debbie Chachra)
Developing Heuristics for Curriculum Design
Frontiers in Education Conference *[FIE]*
San Antonio, Texas

April 2010 — Workshop Leader (with Mark Somerville)
Design Thinking
A Workshop for Universidad Adolfo Ibáñez/LASPAU
Organizer/co-presenter

June 2010 — Faculty Presenter
Program for *Leading Innovations in Health Care Delivery and Education*
Harvard Medical School

June 2010 — Program Coordinator; Workshop Leader (w/Jessica Townsend, Yevgeniya Zastavker)
Curriculum Design for iCons
Interdisciplinary Concentration in the Sciences (iCons)
University of Massachusetts
Amherst, Massachusetts

June 2010 — Program Director
Meeting the Needs of the Twenty-First Century: Designing for Student Engagement
Olin College Initiative for Innovation in Engineering Education
Needham, Massachusetts

August 2010 — Workshop Facilitator
Backwards Course Design and *Designing Learning Activities to Meet Learning Objectives*
Babson Teaching Fellows Program, Babson College

January 2011 — Special Session Leader (with Debbie Chachra)
Who You Are Is What You Teach: Gender, Micromessaging, and Engineering Education
Active Learning in Engineering Education *[ALE]*
Santiago, Chile

January 2011 — Special Session Leader (with Mark Somerville)
Engaging Students in Visual Thinking
Active Learning in Engineering Education *[ALE]*
Santiago, Chile

March 2011 — Breakout Session Leader
Educating the Next Generation Value-Driven Engineer
Safe Haven Summit on BioInnovation
Austen BioInnovation Institute in Akron (ABIA)
Washington, DC

June 2011 — Program Director
Meeting the Needs of the Twenty-First Century: Designing for Student Engagement
Olin College Initiative for Innovation in Engineering Education
Needham, Massachusetts

June 2011 — Faculty Presenter
Program for *Leading Innovations in Health Care Delivery and Education*
Harvard Medical School
Boston, Massaschusetts

June 2011 — Special Session Leader (with Debbie Chachra and Yevgenia V. Zastavker)
Gender Schemas, Privilege, Micro-messaging, and Engineering Education: Practical Lessons from Theory
First-year Programs Division and Women in Engineering Division
American Society for Engineering Education *[ASEE]*
Vancouver, British Columbia

July 2011 — Program Coordinator; Workshop Leader (with Debbie Chachra, Lawrence Neeley)
Designing for Student Engagement: A Three Day Course
Singapore Polytechnic
Singapore

July 2011 — Workshop Leader
(Your) Challenges and Obstacles and *Crafting a Draft Operational Document*
NAE Grand Challenge Scholars Program Workshop
Austin, Texas

December 2011 — Workshop Leader
What is a Johns Hopkins Engineer?
A Workshop for the Whiting School of Engineering
Johns Hopkins University
Baltimore, Maryland

March 2012 — Program Coordinator; Workshop Leader
(with Debbie Chachra and Alisha Sarang-Sieminski)
Challenges of Studio Pedagogy: A Four Day Course
Singapore Polytechnic
Singapore

March 2012 — Program Coordinator; Workshop Leader (with Allen Downey)
Curricular Visioning
A Workshop for King Mongkut's University of Technology Thonburi (Thailand)
Needham, Massachusetts

April 2012 — Workshop Leader
Curricular Visioning
Department of Computer Science and Engineering
Lehigh University
Bethlehem, Pennsylvania

May 2012 — Workshop Leader
Curricular Innovation in the Information Technology and Web Services Program
Symposium on Teaching and Learning
Rensselaer Polytechnic Institute
Troy, New York

June 2012 — Program Director
Meeting the Needs of the Twenty-First Century: Designing for Student Engagement
Olin College Initiative for Innovation in Engineering Education
Needham, Massachusetts

June 2012 — Special Session Leader (with Caitrin Lynch)
Connecting with Community: Empathy, Experience, and Engineering with Elders
Active Learning in Engineering Education *[ALE]*
Copenhagen, Denmark

October 2012 — Special Session Leader (with Debbie Chachra, Caitrin Lynch, Alisha Sarang-Sieminski, Yevgeniya V. Zastavker)
An Interactive Exploration of Gender and Engineering: Unpacking the Experience
Frontiers in Education Conference *[FIE]*
Seattle, Washington

October 2012 — Special Session Leader (with Caitrin Lynch)
Connecting with Community: Empathy, Experience, and Engineering with Elders
Frontiers in Education Conference *[FIE]*
Seattle, Washington

March 2013 — Special Session Leader (with Debbie Chachra)
An Interactive Exploration of Gender and Computing: Unpacking the Student Experience
ACM Symposium on Computer Science Education *[SIGCSE]*
Denver, Colorado

March 2013 — Workshop Leader
Catalyzing & Sustaining Change in Computing Education
ACM Symposium on Computer Science Education *[SIGCSE]*
Denver, Colorado

June 2013 — Program Director
Meeting the Needs of the Twenty-First Century: Designing for Student Engagement
Olin College Initiative for Innovation in Engineering Education

July 2013 — Facilitator
Curriculum Visioning Workshop for Insper
At Olin College

October 2013 — Workshop Leader
Designing Right (Paper Prototyping)
Insper (Business and Economics Program)
São Paulo, Brazil

November 2013 — Facilitator
Curriculum Development Workshop for Insper
At Olin College

January 2014 Workshop Leader
Catalyzing & Sustaining Change in Computing Education
Australasian Computing Education Conference
Auckland, New Zealand

January 2014 Workshop Leader (with Debbie Chachra)
An Interactive Exploration of Gender and Computing: Unpacking the Student Experience
Australasian Women in Computing Conference
Auckland, New Zealand

February 2014 Workshop Leader (with Caitrin Lynch, Elizabeth Doyle, and Sharon Grimshaw)
Connecting with Community: Empathy, Experience, and Engineering with Elders
Association for Gerontology in Higher Education *[AGHE]*
Denver, Colorado

June 2014 Program Director
Meeting the Needs of the Twenty-First Century: Designing for Student Engagement
Olin College Collaboratory
Needham, Massachusetts

August 2014 Workshop Leader
Rethinking Engineering Education: Could it Work?
Olin College Collaboratory
Needham, Massachusetts

October 2014 Special Session Leader (with Mallory Chua, Robin Adams, Sally Fincher)
How Else Do We Talk About 'Impact?': Engineering Education Change Language Beyond 'Dissemination'
Frontiers in Education Conference *[FIE]*
Madrid, Spain

October 2014 Special Session Leader (with Jessica Townsend)
A Student-Centered Approach to Designing Teaming Experiences
Frontiers in Education Conference *[FIE]*
Madrid, Spain

November 2014 Workshop Leader (with Jose Oscar Mur-Miranda)
Inspiring Collaboration: Faculty Development at Olin College
For *Expertise Educão*
At Olin College

November 2014 Workshop Leader (with Debbie Chachra)
Curriculum Visioning and Curriculum Design for Student Engagement
At Griffith University
Gold Coast, Queensland, Australia

June 2015 Program Director
Meeting the Needs of the Twenty-First Century: Designing for Student Engagement
Olin College Collaboratory
Needham, Massachusetts

July 2015 Session Leader (with Mallory Chua, Sara Hendren, and Caitrin Lynch)
Designing for Atypical Bodies and Minds: Politics and Practices
Workshop on Active Learning in Engineering Education
San Sebastian, Spain

July 2015 Session Leader (with Mallory Chua)
Unpacking the Language of 'Impact' and 'Success' in Project-Based Learning Initiatives
International Symposium on Project Approaches in Engineering Education
San Sebastian, Spain

July 2015 Session Leader (with Debbie Chachra)
A Student-Centered Approach to Designing Teaming Experiences: Research and Practice
International Symposium on Project Approaches in Engineering Education
San Sebastian, Spain

October 2015 Workshop Leader
Facilitating Teamwork in Project-Based Learning
Ahmedabad University
Ahmedabad, Gujarat, India

October 2015 Workshop Leader
Design Project (Paper Prototyping)
Ahmedabad University
Ahmedabad, Gujarat, India

December 2015 Facilitator
Onboarding Workshop for New Faculty/Curriculum Development Workshop
Insper (Engineering Program)
São Paulo, Brazil

June 2016 Program Director
Meeting the Needs of the Twenty-First Century: Designing for Student Engagement
Olin College Collaboratory
Needham, Massachusetts

June 2016 Program Director
Focus Workshops
Olin College Collaboratory
Needham, Massachusetts

June 2016 Program Director
Partner Convening
Olin College Collaboratory
Needham, Massachusetts

June 2016 Session Leader (with Debbie Chachra)
A Student-Centered Approach to Designing Teaming Experiences: Research and Practice
Olin College Collaboratory
Needham, Massachusetts

October 2016 Workshop Leader (with Helen Donis-Keller)
Strategies for Student Engagement and Learning
Texas A&M University
Doha, Qatar

Graduate Theses Supervised

All theses are at MIT unless otherwise indicated.

See also the Publications of Students of Lynn Andrea Stein

Doctoral Theses, Supervisor

1. Horswill, Ian Douglas, "Specialization of Perceptual Processes," May 1993 (co-supervised with R. A. Brooks). ACM Distinguished Dissertation Nominee; George M. Sprowls Prize.
2. Spertus, Ellen, "Mining Links," January 1998.
3. Bryson, Joanna, "Intelligence by Design," June 2001.

Doctoral Theses, Reader

1. Parker, Lynne E., "A Theory of Situated Agent Cooperation," January 1994.
2. Engelson, Sean Philip, "Passive Map Learning and Visual Place Recognition," May 1994 (Yale University).
3. Bergman, Ruth, "Learning World Models of Environments with Manifest Causal State," May 1995.
4. Levison, Libby, "Grounding Planning in Action: Towards an Architecture for Object-Specific Reasoning," May 1996 (University of Pennsylvania).
5. Smith, Chris, "Monitoring Dynamic Fields with Multiple Autonomous Underwater Vehicles, February 1998 (Department of Ocean Engineering).
6. Isbell, Charles, "Using Compression to Build Hierarchical Representations and Learn Consequences," May 1998.
7. Sarmenta, Luis F. G., "Volunteer Computing", May 2001.

Doctoral Thesis Examinations (Opponent)

1. Lassila, Ora, "Programming Semantic Web Applications: A Synthesis of Knowledge Representation and Semi-Structured Data," November 2007 (Helsinki University of Technology).

Post-Doctoral Associates

1. Robert Ringrose, 1996-1997.
2. Libby Levison, 2000.
3. Joanna Bryson, 2001.
4. Amon Millner, 2010-2012.
5. Mallory Chua, 2015-*present*.

S.M. and M.Eng. Theses

1. Mercado, Jr., Antonio, "Hybrid: Implementing Classes with Prototypes," August 1988 (Brown University, with P. Wegner).
2. Torrance, Mark C., "Natural Communication with Robots," January 1994.
3. Coen, Michael H., "SODABOT: A Software Agent Environment and Construction System," May 1994.
4. Yanco, Holly A., "Robot Communication: Issues and Implementation," May 1994.
5. Scassellati, Brian, "High-level Perceptual Contours from a Variety of Low-level Physical Features," May 1995 (M.Eng., also used for Sc.B.). Morris Joseph Levin Memorial Award for Best Master Works Oral Thesis Presentation.
6. Wessler, Michael, "A Modular Visual Tracking System," May 1995.
7. Kramer, Joshua, "Agent Based Personalized Information Retrieval." May 1997 (M.Eng., also used for Sc.B.).
8. Adar, Eytan, "Hybrid-Search and Storage of Semi-Structured Information," May 1998 (M.Eng., co-supervised with D. Karger).
9. Asdoorian, Mark, "Query Analysis and Query Logging Objects in Haystack," May 1998 (M.Eng., also to be used for Sc.B., co-supervised with D. Karger).
10. Parnell, Todd C., "Anonymous Authentication in Dynamic Groups," May 1999 (M.Eng., also used for Sc.B.).
11. Henderson, Craig, "Robot World: A Learning Laboratory for Prospective Computer Scientists," June 1999 (M.Eng.).
12. Chien, Wendy, "Learning Query Behavior in the Haystack System," May 2000 (M.Eng., also used for Sc.B., co-supervised with D. Karger).
13. Shnitser, Svetlana, "Integrating Structural Search Capabilities Into Project Haystack," May 2000 (M.Eng., also used for Sc.B., co-supervised with D. Karger).
14. Holt, Adam, "Scan Your Life: Integrating OCR Into Your Personal Haystack," August 2000 (M.Eng., also used for Sc.B., co-supervised with D. Karger).
15. Olson, Edwin, "Otto: A Low-Cost Robotics Platform for Research and Education," May 2001 (M.Eng., also used for Sc.B.).
16. Bajrachaya, Max, "Design and Development of a High-Performance, Low-Cost Robotics Platform for Research and Education," May 2001 (M.Eng., also used for Sc.B.).
17. Prevost, Janelle Kenty-Jane, "A Reliable Low Bandwidth Email-based Communication Protocol," May 2001 (M.Eng., co-supervised with L. Levison).
18. McCracken, Kenneth D., "Dynamic and Robust Data Storage and Retrieval in the Haystack System," June 2001 (M.Eng., proposal used for Sc.B., co-supervised with D. Karger).
19. Litvak, Yuliya, "Somewhat Supervised Clustering: Exploring the Use of Clustering in Classification of Text Documents," September 2001 (Tufts University Department of Computer Science, co-supervised with L. Levison).

Undergraduate Independent Study and Capstone Projects Supervised

MIT S.B. Theses and Advanced Undergraduate Projects

1. Domsch, Matthew, "6.270 Instructor's Manual," May 1994.
2. Pitroda, Salil, "RobotWorld: A Means of Introducing Interactive Software," May 1996.
3. Adar, Eytan, "Haystack: A Personal, Intelligent, Indexing System." December 1996. (co-supervised with D. Karger).
4. Lopes, Chris, "Aura." May 1997 (6A AUP).
5. Goyal, Siddhartha, "An Implementation of the MIME Based Data Synchronization Protocol." May 1999 (6A AUP).

Olin Independent Study Projects

1. Curtis, Michael, *Artificial Intelligence*, Spring 2004.
2. Jemmott, George, *Artificial Intelligence*, Spring 2004.
3. Rivard, Kathryn, *Artificial Intelligence*, Spring 2004.
4. Wu, Michael *Artificial Intelligence*, Spring 2004.
5. Leavitt, Sarah, *Memory and Learning*, Fall 2005.
6. Blazek, Katerina, *Czech Literature*, Spring 2006 (Olin Self Study).
7. Inouye, Cheryl, *Comparative Culture in Japan and America*, Spring 2006 (Olin Self Study).
8. Raphael, Jonathan, *Analogy is to Learning…*, Spring 2006.
9. Rynning, Ann Marie, *One Thousand Nights and One Night: Background to the Arabian Nights*, Spring 2006 (Olin Self Study).
10. McBride, Sean, *OlinBuster: A Semantic Web Media Directory*, Spring 2006.
11. Murphy, Christopher, and Kathryn Rivard, *Porting Fresnel to Python: Making a Practical Semantic Web Application*, Spring 2006.
12. Chua, Mallory, *Pedagogy for CS Textbooks*, Fall 2006.
13. Quimby, Robert, *Artificial Intelligence and the Web*, Fall 2006 (Olin Self Study).
14. College, Adam Joseph, *A Web-Based Networking Tool for Post-College Employment Recruiting*, Spring 2007 (Olin Self Study).
15. Quimby, Robert, *Automated Classification of Blogs on the World Wide Web*, Spring 2007 (Olin Self Study).
16. Wheeland, Cody, *The Effects of Handedness in MultiTouch Display Use*, Spring 2007 (Olin Self Study).
17. Nelson, David, *Web Design*, Fall 2008 (Olin Self Study).
18. Shipplett, Sarah Beth, *Artificial Intelligence*, Fall 2008.
19. Zimmermann, Sarah, *Etiquette*, Spring 2009.
20. Howell, Noura, *C and C++*, Fall 2011.
21. Bejar, Miguel, Paul Booth, Julian Ceipek, Gwynneth Davidoff, William Dolphin, Chase Kernan, Rhan Kim, Natalie Mattison (Olin Self-Study), Thomas Pandolfo (Olin Self-Study), Andrew Pikler, Hannah Sarver, and Poorva Singal, *Seven Languages in Seven Weeks*, Fall 2011.
22. Singal, Poorva, *Ruby and Concurrency* (Olin Self-Study), Spring 2012.
23. Hwang, Irene, and Helen Wang, *Redesign of a Personal Emergency Response System (PERS) for Improved Compliance*, Spring 2012 (with C. Lynch)
24. Huang, Matthew, *User Testing of an iPhone App for Persons with Dementia*, Spring 2012.
25. Haverstock, Keely, and Sarah Strokorb, *Artificial Intelligence: Programming a Robotic Car*, Fall 2012.
26. Eghtebas, Chloe, and Brendan Ritter, *Creating a Computer Game from Scratch*, Fall 2012

27. Grimshaw, Sharon, and Aiswarya Kolisetty, *User Testing of an iPhone App for Persons with Dementia*, Fall 2012.
28. Grimshaw, Sharon and Helen Wang, *Design for Older Adults*, Spring 2013.
29. Hooton, Graham, *Does NeuroTracker improve college student performance on cognitive tests?*, Spring 2013.
30. Doyle, Elizabeth, and Sharon Grimshaw, *Design for Older Adults*, Fall 2013.
31. Keung, Kat Yeung (Christine), and Hongda (Louis) Yi, *Understanding the Grocery Experience for Older Adults*, Fall 2013.
32. Grimshaw, Sharon, *Design Theory*, Fall 2013 and Spring 2014.
33. Brookshier, Kathryn, *History of Web Design*, Spring 2014.
34. Gorson, Jamie, *Community Service Engineering*, Spring 2015.
35. Keum, A Young Claire, *2nd Design Iteration on UFGM*, Spring 2016.
36. Deaver, Andrew, *Machine Learning and Natural Language Processing*, Fall 2016.

Olin Arts, Humanities, and Social Science Capstone Projects

1. Blazek, Katerina, *Leo Perutz: The Search for Identity*, Fall 2005.
2. Cave, Etosha, *Afro-Argentines*, Fall 2005.
3. Kochem, Thomas, and Kevin Tostado, *Yellow Lights: A Screenplay*, Fall 2005.
4. Leavitt, Sarah, *Some Hypotheses Regarding the Cognitive Basis for the Success of Cooperative Learning in Engineering Education*, Fall 2005/Spring 2007.
5. Lindquist, Daniel, *An Analysis of the Depiction of* Oni *across Japanese Songs and Folk Tales*, Fall 2005.
6. Murphy, Christopher, *Ormen Lange: Politics where Petroleum Meets the Past*, Fall 2005.
7. Poisel, Joy, and Nicholas Zola, *Paul's Hidden Meaning in Philemon: A Demonstration of Hermeneutics*, Fall 2005.
8. Zwicker, Sarah, *Gender, Womanhood, and Motherhood in Testimonio*, Fall 2005.
9. Gordon, Lindsay, *Language Immersion in Preschool Education*, Spring 2006.
10. Inouye, Cheryl, *Anime in Japanese and American Teen Culture* , Spring 2006.
11. McCraw, Kim, *Everyday Ethics: A Study of Applied Ethics in Everyday Life*, Spring 2006.
12. Murphy, Catherine, *Philosophy of Engineering*, Spring 2006.
13. Nguyen, Que Anh, *Exploration of French-Vietnamese Cultural Fusion through Cuisine: Un Dîner Français-Vietnamien*, Spring 2006.
14. Rynning, Ann Marie, *One Thousand Nights and One: Early Translations*, Spring 2006.
15. Taylor, Mikell, *French Language and Culture*, Spring 2006.
16. Walsh, Mary Kate, *How Cultural Differences Affect Business Practices in International Corporations*, Spring 2006.
17. Holler, Joseph, *The Western Sun: A Novel*, Fall 2008.
18. Kavett, Katherine, *Allusion in The Producers*, Fall 2008.
19. Sullivan, Jessica, *Attitudes of College-Aged Males Towards Marriage*, Fall 2008.
20. Townsend, Kathleen, *Literary Style and the Novels of Virginia Woolf*, Fall 2008.
21. von Reden, Anna, *Beholdyn: A Novel*, Fall 2008.
22. Belisle, Rebecca, *To the Reservoir* (Art Installation), Spring 2010.
23. Dethrow, Logan, *Science Fiction and Scientists*, Spring 2010.
24. Elliott, Katherine, *Figurine Philosophy*, Spring 2010.
25. Engelbert-Fenton, Leah, *Faces of Latino Immigrants: A New Perspective*, Spring 2010.
26. Hughes, Michael, *The Evolution of Islamism in Palestine: A Historical and Ethnographic Analysis*, Spring 2010.

27. Inman, Jonathan, *International Relations*, Spring 2010.
28. Kiser, Jillian, *The Christian Reaction to Harry Potter*, Spring 2010.
29. Lorenc, Olek, *Urban Development in Krakow*, Spring 2010.
30. McCready, Joshua, *A Bird in the Hand: Mixed Media Dynamic Bio Sculpture*, Spring 2010.
31. Miller, Katarina, *Investigating the Detention of Terror Suspects in the U.S. and the U.K.*, Spring 2010.
32. Murray, Jessica, *Black and White Street Photography in Boston*, Spring 2010.
33. Mutha, Heena, *A Proposal for Olin Involvement in K-12 Engineering Education Outreach*, Spring 2010.
34. Newell, Zachary, *Creating A Science Fiction Short Story*, Spring 2010.
35. Rich, Meagan, *Exploring Student Teaching: Elementary Education*, Spring 2010.
36. Sass, George, *Soviet Social Realism and Modern Media*, Spring 2010.
37. Sun, Yifan, *Obligation without Capability: The Consequences of Responsibility in Depression-era Literature*, Spring 2010.
38. Sweetgall, Marc, *Making foreign sounds: an acoustic phonetic analysis of Americans learning to speak French*, Spring 2010.
39. Switzer, James, *Perspective and Contradictory Illusory Spaces*, Spring 2010.
40. Taylor, Michael, *Environmental Activism*, Spring 2010.
41. Weis, Lorraine, *Ceramics and Trade in Mycenaean Greece*, Spring 2010.

Olin Senior Capstone Projects in Engineering

1. Crowther, Molly, Kent Munson, Katherine Murphy, Eric Shooman (Babson), Timothy Smith, and Jessica Sullivan, *Mobile Devices for Learning*, sponsored by Pearson Education, 2008-2009 (co-supervised with Mark Somerville).
2. Hollen, Bryn, Thomas Michon, David Nelson, Aisaku Pradhan, and Leslie Velez, *Accessible Interfaces for Lexmark Multi-Function Printers*, sponsored by Lexmark, 2008-2009 (angel advisor).
3. Balestra, Martina, Erika Boeing, Leslie Gerhat, Luis Gutierrez, Eric Hwang, and Jeffrey Moore, sponsored by MITRE, 2009-2010.
4. Edelston, Gregory, Sharon Grimshaw, Zachary Homans, Shane Skikne, and Lyra Silverwolf, *Connected Aging: Empowering Seniors to Thrive while Aging in Place*, sponsored by Care.com, 2014-2015.
5. Grimshaw, Susan, J. Austin Greene, Jennifer Wei, Jiaying Wei, and Hannah Wilk, *Joy of Food in the Golden Age*, sponsored by Mitsubishi Electric, 2016-2017.

Teaching

At Harvard University
Except as specified, all courses were taught in the regular undergraduate program in Computer Science.

Spring 1983	Harvard Extension School Mathematics 21ab (Calculus/Linear Algebra)	Teaching Assistant
1983-1985	Harvard College Core Computer Requirement (BASIC Programming)	Teaching Fellow
Spring 1984	Computer Science 150 (Introduction to CS II)	Recitation (1 section)
Spring 1985	Computer Science 150 (Introduction to CS II)	Recitation (2 sections) Head Teaching Fellow
Fall 1985	CS11 (Introduction to CS I)	Recitation (1 section)

At MIT
All regular term courses are in the Department of Electrical Engineering and Computer Science unless otherwise specified. Summer courses are offered through the Professional Institute.

Fall 1990	6.001 Structure and Interpretation of Computer Programs	Recitation (2 sections)
Spring 1991	6.001 Structure and Interpretation of Computer Programs	Recitation (2 sections)
Spring 1991	✱ 6.892 Robot Development ✱	Seminar
Fall 1991	✱ 6.891 Readings in the Foundations of Artificial Intelligence ✱	Seminar
Fall 1991	6.915 Robot Design Seminar	Faculty Supervisor
Spring 1992	6.001 Structure and Interpretation of Computer Programs	Lectures (part)
Fall 1992	6.001 Structure and Interpretation of Computer Programs	Recitation (2 sections)

✱ New course; developed curriculum as well as taught.

Spring 1993	6.004 Computation Structures	Recitation (2 sections)
Fall 1993	✱ 6A16 Robot Building Collaborative ✱ Edgerton Center/Freshman Advisor Seminar	Seminar
Fall 1993	✱ 6.891 Embodiment and Cognition ✱	Seminar
Fall 1994	6.001 Structure and Interpretation of Computer Programs	Lectures (part)
Spring 1995	6.002 Circuits and Electronics	Recitation (2 sections)
Spring 1996	6.001 Structure and Interpretation of Computer Programs	Recitation (2 sections)
Summer 1996	✱ 6.80s Programming Interactive Content on the World-Wide Web: Introduction to Interactive Programming: For Executives and Managers ✱	In-Charge, Lectures
Fall 1996	✱ 6.096 Introduction to Interactive Programming ✱	In-Charge, Lectures
Spring 1997	6.001 Structure and Interpretation of Computer Programs	Recitation (2 sections)
Summer 1997	✱ 6.75s Interactive Programming in Java ✱	In-Charge, Lectures
Fall 1997	6.096 Introduction to Interactive Programming	In-Charge, Lectures
Summer 1998	6.75s Interactive Programming in Java	In-Charge, Lectures
Spring 1999	6.001 Structure and Interpretation of Computer Programs	Lectures (part)
Fall 1999	6.030 Introduction to Interactive Programming (formerly 6.096)	In-Charge, Lectures
Spring 2000	6.001 Structure and Interpretation of Computer Programs	Recitation (2 sections)
Spring 2000	SP.742 Random Hall Robotics Seminar	Faculty Supervisor

✱ New course; developed curriculum as well as taught.

At Harvard Graduate School of Education
These minicourses were taught as professional enrichment to public and private school K-12 teachers through the **Teachers as Scholars** program.

January 2001	* What Is Intelligence? *	Seminar
March – April 2002	What Is Intelligence?	Seminar

This course was also repeated for the Needham Public School System.

At Harvard University School of Engineering and Applied Sciences

Spring 2008	* CS179: Design of Usable Interactive Systems *	Course with studio, originator

At Ahmedabad University
This week-long minicourse was included in the University-wide Independent Studies Period.

December 2016	* Artificial Intelligence *	Interactive Seminar, originator

At Olin College of Engineering

Module 1 Fall 2001	* Robotics Project *	Laboratory
Module 3 Winter 2001	Assessment (Program Development)	Seminar

* New course; developed curriculum as well as taught.
* New course; developed curriculum as well as taught.

Module 3 Winter 2002	Arts, Humanities, Social Sciences Curriculum Development	Seminar
Module 3 Winter 2002	September 11 and the Psychology of Hatred	Co-Curricular
Module 4 Spring 2002	✱ What is 'I': A Multidisciplinary Exploration of Identity ✱	Course
Module 6 Spring 2002	Arts, Humanities, Social Sciences Curriculum Development	Seminar
Module 6 Spring 2002	✱ Daily Themes: Writing Practicum ✱	Seminar
Spring 2003	ELE1050: Introduction to Interactive Programming	Course with laboratory
Fall 2003	ELE1050: Introduction to Interactive Programming	Course with laboratory
Fall 2003	Sophomore Design Project (Introductory Practicum)	Section Instructor
Spring 2004	ENGR2240: User Oriented Collaborative Design (formerly Sophomore Design Project)	Section Instructor
Spring 2004	✱ AHS1150: What is "I"? ✱	Course, co-originator
Spring 2004	Artificial Intelligence Independent Study	Seminar
Fall 2004	✱ ENGR3520: Foundations of Computer Science ✱ *and* ✱ ENGR3520a: Foundations of Computer Science Project ✱	Course with laboratory, originator

✱ New course; developed curriculum as well as taught.

Fall 2004	Cognitive Science Reading Group	Co-curricular
Fall 2004	* Gender and Engineering *	Co-curricular
Spring 2005	AHSE1150: What is "I"? (Arts, Humanities, and Social Sciences Foundation)	Course
Spring 2005	* ENGR3220: Human Factors and Interface Design *	Course with studio, originator
Spring 2005	* The Practice and Politics of Needlework *	Co-curricular
Fall 2005	ENGR3220: Human Factors and Interface Design	Course with studio
Fall 2005	* AHSE4190: Arts, Humanities, and Social Sciences Capstone Project *	Seminar / Thesis Supervision
Fall 2005	Gender and Engineering	Co-curricular
Spring 2006	ENGR3520: Foundations of Computer Science *and* ENGR3520a: Foundations of Computer Science Project	Course with laboratory
Spring 2006	AHSE4190: Arts, Humanities, and Social Sciences Capstone Project	Seminar / Thesis Supervision
Spring 2006	The Practice and Politics of Needlework	Co-curricular
Fall 2006	AHSE1150: What is "I"? (Arts, Humanities, and Social Sciences Foundation)	Course

* New course; developed curriculum as well as taught.

Fall 2006	ENGR3220: Human Factors and Interface Design	Course with studio
Spring 2007	✱ ENGR3599: Special Topics in Computing: Artificial Intelligence ✱	Course, originator
Fall 2008	AHSE4190: Arts, Humanities, and Social Sciences Capstone Project	Seminar / Thesis Supervision
Fall 2008 – Spring 2009	ENGR4190: Senior Consulting Program for Engineering	Group Thesis Supervision
Fall 2008	ENGR2510: Software Design	Course with laboratory
Spring 2009	ENGR3220: Human Factors and Interface Design	Course with studio
Spring 2009	ISR: Mobile Application Development	Occasional Advisor / Guest Instructor
Fall 2009	ENGR3220: Human Factors and Interface Design	Course with studio
Fall 2009	OIE (MTH1111/SCI1111): Modeling and Simulation of the Physical World	Course with studio
Fall 2009	✱ ISR: Mobile Application Exploration ✱	Non-Credit Seminar, Co-originator
Fall 2009 – Spring 2010	ENGR4190 Senior Consulting Program for Engineering	Group Thesis Supervision

✱ New course; developed curriculum as well as taught.

Spring 2010	AHSE4190: Arts, Humanities, and Social Sciences Capstone Project	Seminar / Thesis Supervision
Fall 2010	ENGR3220: Human Factors and Interface Design	Course with studio
Fall 2010	ENGR3520: Foundations of Computer Science	Course
Spring 2011	✱ AHSE2199/ENGR2199: Engineering for Humanity ✱	Course with studio, Co-originator
Fall 2011	ENGR3220: Human Factors and Interface Design	Course with studio
Fall 2011	MTH1111/SCI1111: Modeling and Simulation of the Physical World	Course with studio
Fall 2011	✱ ISR/OSS: Seven Languages in Seven Weeks/Eight Languages in a Semester ✱	Group Independent Study, Co-originator
Spring 2012	AHSE2199/ENGR2199: Engineering for Humanity	Course with studio
Fall 2012	ENGR2510: Software Design	Course with laboratory
Fall 2012	MTH1111/SCI1111: Modeling and Simulation of the Physical World	Course with studio
Spring 2013	✱ ENGR3599: Special Topics in Computing: Artificial Intelligence ✱	Course, originator

✱ New course; developed curriculum as well as taught.
✱ New course; (re-)developed curriculum as well as taught.

Spring 2013	Gender and Engineering	Co-curricular
Fall 2013	AHSE1150: What is "I"? (Arts, Humanities, and Social Sciences Foundation)	Course
Fall 2013	ENGR3220: Human Factors and Interface Design	Course with studio
Spring 2014	User Oriented Collaborative Design	Course with studio
Spring 2014	Gender and Engineering	Co-curricular
Fall 2014	ENGR3220: Human Factors and Interface Design	Course with studio
Fall 2014 – Spring 2015	ENGR4190: Senior Consulting Program for Engineering	Group Thesis Supervision
Spring 2015	Collaboratory Conversations	Co-curricular
Fall 2015	ENGR3220: Human Factors and Interface Design	Course with studio
Fall 2015	Collaboratory Conversations	Co-curricular
Spring 2016	ENGR2240: User Oriented Collaborative Design	Course with studio
Fall 2016	ENGR3520: Foundations of Computer Science	Course

Fall 2016 – Spring 2017	ENGR4190: Senior Consulting Program for Engineering	Group Thesis Supervision
Spring 2017	ENGR2240: User Oriented Collaborative Design	Course with studio

Grants and Contracts

Embodiment Informs Cognition, National Science Foundation Young Investigator Award, 1993-1999 ($312,500).

Unrestricted Support, Mitsubishi Electric Research Labs, 1993-1999 ($130,000).

The Intelligent Room (Rodney A. Brooks, PI), DARPA/Rome Labs, 1994-1999 ($2,132,118).

A Trainable Modular Vision System (Rodney A. Brooks, PI), DARPA/ONR Multidisciplinary University Research Initiative 1995-2000 ($7,711,416).

Rethinking CS101 Computer Laboratory, Microsoft University Curriculum Program, 1998 (30 Dell Workstation 410 Pentium II 400MMX PCs valued at $120,719).

Haystack: Per-User Information Environments (co-PI with David Karger), Nippon Telephone and Telegraph (NTT), 1999-2000 ($195,000)

Personalized Information Retrieval (co-PI with David Karger), Merrill Lynch, 1999-2000 ($150,000)

Radically Rethinking CS1, National Science Foundation CISE Educational Innovation Award, 1999-2005 ($449,606).

The Semantic Web (co-PI with Tim Berners-Lee, Ralph R. Swick, Daniel J. Weitzner and David R. Karger), DARPA Agent Markup Language Program (DAML), 2000-2002 ($1.4M).

Shifting the Computational Paradigm, Rome Laboratories, 2001-2004. ($880,583).

Semantic Web Development, subcontract to MIT under DARPA through DAML program, 2001-2004 ($22,092).

International Travel: Working Group on (Re)Defining Computing (Charles Isbell, PI), National Science Foundation International Travel Grant, 2009 ($50,000).

Workshop: Developing a National Network of Grand Challenge Scholars Programs, National Science Foundation Division of Undergraduate Education, 2009-2011 ($50,000).

Spreading Small Footprints, National Science Foundation CISE Pathways to Revitalizing Computing Education (CPATH), 2009-2015 ($141,755).

Computational Innovation Fellow, Subaward to National Science Foundation Grant #10-19343 to the Computing Research Association, 2010-2012 (subaward $280,000).

Engineering for Humanity: Helping Elders Age in Place through Partnerships for Healthy Living (co-PI with Caitrin Lynch), Metrowest Community Health Care Foundation, 2010-2013 ($60,000).

Argosy Foundation Faculty Exchange Program (to Olin College/President Richard K. Miller), Argosy Foundation, 2012-2019 ($1,300,000).

REU Site: Engineering Education Research: Understanding and Improving Student Experiences (Senior Personnel; PI Debbie Chacra, co-PI Yevgeniya V. Zastavker), National Science Foundation Division of Undergraduate Education, 2012-2015 ($423,565).

Jumpstarting Collaborative Curricular Innovation on College Campuses in New England, Davis Educational Foundation, 2013-2017 ($131,402).

Olin-UTEP Partnership for Change: Adoption and Adaptation of Innovative Practices for 21st Century Engineering (Senior Personnel; Olin subcontract PI Jessica Townsend), US Department of Education Minority Science and Engineering Improvement Program award to the University of Texas at El Paso, 2014-2017 (subcontract $204,190).

Accelerating Entrepreneurial Thinking in Undergraduate Engineering Education: A Partnership between the Kern Family Foundation and Olin College of Engineering (College Proposal led by President Richard K. Miller and Provost Vincent P. Manno), Kern Family Foundation, 2016-2020 ($6,060,529).

In addition, I have received funding or donations of $50,000 or less from the following sources:

Gates Energy Products
General Electric Foundation
Google
Gordon Brown Fund
Jeptha H. and Emily V. Wade Fund
Metrowerks
MIT Class of 1951/1955 Funds for Excellence in Education and Teaching
MIT Class of 1957 Career Development Fund
The MITRE Corporation
Motorola
The National Academy of Engineering
Center for the Advancement of Scholarship in Engineering Education
Nokia Research Laboratories
Olin College Innovation Fund
ONR Science Scholars Program, Radcliffe College
Sun Microsystems
Tektronix

The Collaboratory (formerly the Initiative for Innovation in Engineering Education) and its programs under my leadership received over $12M dollars in funding from the following organizations:

AMD
The Argosy Foundation
Autodesk
Boeing
The John and Donnie Brock Foundation
The Cabot Corporation Foundation
The Davis Educational Foundation
DRS Technologies
The Ewing Marion Kauffman Foundation
Fidelity
IBM
Insper: Instituto de Ensino e Pesquisa
The Kern Family Foundation
National Collegiate Inventors and Innovators Alliance
Herefordshire Tertiary Education Trust/New Model in Technology & Engineering.
Raytheon
Singapore Polytechnic
Staples