UNIVERSITY of WASHINGTON | TACOMA

SCHOOL OF ENGINEERING & TECHNOLOGY

Curriculum Vita

Josh Tenenberg

May 2024

1. PROFESSIONAL EXPERIENCE

2006-present	Professor, School of Engineering & Technology University of Washington, Tacoma, WA, USA
2013-2014	Visiting Scholar, Department of Computer Science University of Victoria, BC, Canada
2000-2006	Associate Professor, Institute of Technology University of Washington, Tacoma, WA, USA
2006	Visiting Associate Professor, School of Informatics Indiana University, Bloomington, IN, USA
1999-2000	Associate Chair, Department of Mathematics & Computer Science Indiana University, South Bend, IN, USA
1998-2000	Associate Professor, Department of Mathematics & Computer Science Indiana University, South Bend, IN, USA
1992-1998	Assistant Professor, Department of Mathematics & Computer Science Indiana University, South Bend, IN, USA
1988-1992	Research Associate, Dept. of Computer Science University of Rochester, Rochester, NY, USA

2. EDUCATION

Advanced Study	Political Theory & Policy Analysis	The Vincent and Elinor Ostrom Workshop on Political Theory and Policy Analysis, Indiana Univ	2006
PhD	Computer Science Dissertation: *Abstraction in Planning*	University of Rochester	1988
MS	Computer Science	University of Rochester	1984
BM	Music Performance, summa cum laude	San Francisco State University	1980

3. AWARDS

Indiana University Teaching Excellence Recognition Award, 1997 and 1998
Indiana University Faculty Colloquium on Excellence in Teaching, 1997

4. PROFESSIONAL SERVICE

Guest Co-Editor, *ACM Transactions on Computing Education*, Special issues on Conceptualizing and Using Theory in Computing Education Research, 2022-2023
ACM Publications Board Assessment & Search Committee, 2018-present
Search Chair, Editor-in-Chief for *Transactions on Design Automation on Electronics Systems*, 2020
Search Committee, Editors-in-Chief for ACM *Inroads*, 2018
Conference Co-Chair, *ACM/SIGCSE Int'l Computing Education Research Conference*, 2016 and 2017

Co-Editor-in-Chief, *ACM Transactions on Computing Education*, 2009-2015
Co-Editor-in-Chief, *ACM Journal on Educational Resources in Computing*, 2006-2009
Guest Co-Editor, *Expert Systems*, Special issue on Card Sorting, 22(3), 2005

5. REVIEWING

National Science Foundation, Swiss National Science Foundation, International Computing Education Research Conference, Australasian Computing Education Conference, Computer Science Education, International Journal of the Commons, International Journal of Human Computer Systems, W.M. Keck Foundation, IEEE Taylor Booth Education Award, Journal of Engineering Education, Annual Midwest Small College Computing Conference, National Conference on Artificial Intelligence, International Joint Conference on Artificial Intelligence Program, International Conference on Tools for Artificial Intelligence, International Workshop on Temporal Representation and Reasoning, Florida Artificial Intelligence Symposium, Artificial Intelligence, Expert Systems: Research & Applications, Journal of Logic and Computation, Journal of Experimental and Theoretical Artificial Intelligence, IEEE Transactions on Systems, Man and Cybernetics, Journal of the Association for Computing Machinery, International Conference on Informatics in Schools: Situation, Evolution, and Perspective, Social Semiotics, CoDesign, Computer Supported Cooperative Work, International Journal of Engineering Education, Design Studies, Studies in Higher Education.

6. FUNDED SUPPORT

Tenenberg, J., Bouvier, D., McCartney, R., Morrison, B., and Sanders, K. "A Network of Disciplinary Commons in Computing Education", National Science Foundation, $74,021, 2008-2012.

Tenenberg, J. (PI), Fincher, S., and Petre, M. "Scaffolding Research in Computer Science Education", National Science Foundation, $164,000, 2003-2006.

Tenenberg, J., Fincher, S., and Petre, M. "Bootstrapping Research in Computer Science Education", National Science Foundation, $97,000, 2001-2003.

Allen, J., Schubert, L., and Tenenberg, J. "Plan-based Situation Assessment in Dynamic Domains", Rome Air Development Center, $1,249,316, 1991-1995.

Tenenberg, J. and Allen, J. "A Probabilistic Approach to Anytime Algorithms for Intelligent Real-Time Problem Solving", Air Force Office of Scientific Research, $80,000, 1990-1992.

7. COURSES TAUGHT

Introduction to Computing
Computer Science Principles
Introduction to Computer Science
Introduction to Software Systems
Foundations of Digital Computing
Programming Languages
Computer Structures
Systems Programming
Compilers
Artificial Intelligence
Discrete Structures
Computers, Ethics & Society
Data Structures

Software Development & Quality Assurance
Database System Design
Human Computer Interaction
Enterprise Application Development
Comparative Programming Languages
Software Engineering
Interaction Design
Masters Seminar in Computer Science
Global Challenges: Cooperation and Commons Governance
Computer Science Principles

8. PUBLICATIONS

Tenenberg, J. *Narratives of Qualitative Research: Making Praxis Visible*, Routledge, 2024.

Tenenberg, J. Conceptualizing the Researcher-Theory Relation. *ACM Transactions on Computing Education*, 23(1): Article 3, 2023.

Tenenberg, J. and Fincher, S. Bridging the gap between the individual and the group: the education of attention in design. *CoDesign*, *19*(1): 36-50, 2023.

Malmi, L. and Tenenberg, J. Editorial for the Second Special Issue on "Conceptualizing and Using Theory in Computing Education Research". *ACM Transactions on Computing Education*, 23(1): Article 1, 2023.

Tenenberg, J. and Malmi, L. Editorial: Conceptualizing and Using Theory in Computing Education Research. *ACM Transactions on Computing Education*, 22(4): Article 38, 2022.

Roth, W-M., Socha, D., Tenenberg, J. How actions and words come to make sense in a continuously changing world of work: a case study from software development. *Semiotica* 2021(238): 211-238, 2021.

Tenenberg, J. Factors Affecting Free Riding on Teams: Implications for Engineering Education. *International Journal of Engineering Education*, 35(6A): 1703–1724, 2019.

Tenenberg, J. and Chinn, D. Social Genesis in Computing Education. *ACM Transactions on Computing Education*, 19(4): Article 34, 2019.

Tenenberg, J. The social genesis in learning. ACM *Inroads*, March, 2019.

Tenenberg, J. Qualitative Methods for Computing Education. In *Cambridge Handbook of Computing Education Research*. Fincher, S. and Robins, A. (Eds.). Cambridge University Press, 2019.

Fincher, S., Tenenberg, J., Dorn, B., Hundhausen, C., McCartney, R., and Murphy, L. Computer Science Education Research Today. In *Cambridge Handbook of Computing Education Research*. Fincher, S. and Robins, A. (Eds.). Cambridge University Press, 2019.

Tenenberg, J. Computational Making. ACM *Inroads*, March, 2018.

Tenenberg, J., Roth, W.-M., Chinn, D., Jornet, A., Socha, D., Walter, S. More than the code: learning rules of rejection in writing programs. *Communications of the Association of Computing Machinery*, May 2018.

Rose, E., Tenenberg, J. Poor poor dumb mouths, And bid them speak for me**:** Theorizing the use of personas in practice. *Technical Communication Quarterly*, 27(2): 161-174, 2017.

Rose, E., Tenenberg, J. Making Practice-Level Struggles Visible: Researching UX Practice to Inform Pedagogy. *Communication Design Quarterly*, 5(1): 89-97, 2017.

Roth, W-M., Socha, D., Tenenberg, J. Becoming-design in corresponding: re/theorizing the co- in codesigning. *CoDesign* 13(1): 1-15, 2017.

Rose, E., Tenenberg, J. Arguing about design: A taxonomy of rhetorical strategies deployed by user experience practitioners. ACM Special Interest Group on the Design of Communication (SIGDOC) Annual Conference, Silver Springs, MD, 2016.

Tenenberg, J., Roth, W.-M., Socha, D. From I-Awareness to We-Awareness in CSCW. *Computer Supported Cooperative Work* 25(4): 235-278, 2016. (Focal article of special issue on Awareness in CSCW)

Roth, W.-M., Tenenberg, J., Socha, D. Discourse/s in/of CSCW. *Computer Supported Cooperative Work* 25(4): 385-407, 2016.

Tenenberg, J. Socha, D. and Roth, W-M. Seing Design Stances. *CoDesign*, 12(1-2): 6-25, 2016.

Socha, D., Adams, R., Franznick, K., Roth, W-M., Sullivan,K., Tenenberg, J., and Walter, S. Wide-Field Ethnography: Studying Software Engineering in 2025 and Beyond. The 38th International Conference on Software Engineering (ICSE), 2016. (Winner of the 1st prize in the CRA/CCC "Blue Sky Ideas" Vision 2025 Conference Track, presented to the top paper that presents "new problems, new application domains, or new methodologies that are likely to stimulate significant new research.")

Socha, D. and Tenenberg, J. Sketching and Conceptions of Software Design. 8th International Workshop on Cooperative and Human Aspects of Software Engineering (*CHASE*). Firenze, Italy, 2015.

Socha, D., Roth, W-M., Tenenberg, J. Taking a (Design) Stance. In Adams, R.S. and Siddiqui, J. (Eds). *Analyzing Design Review Conversations* . Purdue University Press: West Lafayette, IN, 2015.

Tenenberg, J and McCartney, R. Looking Backward to Look Forward: TOCE in Transition. *ACM Transactions on Computing Education*, 15(3), 2015.

Rose, E. and Tenenberg, J. UX as Disruption: Managing team conflict as a productive resource. *International Journal of Sociotechnology and Knowledge Development*, 7(3): 1-19, 2015.

Sun, H. and Tenenberg, J. From Descriptive to Generative, From Critical to Creative: Introducing Theory-Informed Design Methodology to Beginner Designers, *Human Computer Interaction Consortium*, Watsonville, CA, 2015.

Tenenberg, J., Socha, D., and Roth, W.F. Designerly ways of being. In Design Thinking Research Symposium 10. W. Lafayette, IN USA, 2014.

Tenenberg, J. Learning through observing peers in practice. *Studies in Higher Education*, 2014.

Tenenberg, J., and Ben-David Kolikant, Y. "Computer Programs, Dialogicality, and Intentionality," The 10th International Computing Education Research Workshop (ICER 2014), Glasgow, Scotland, August 2014. (Winner of the John Henry Award for the paper that "pushes the upper limits of our pedagogy.")

Tenenberg, J. "Asking Research Questions: Theoretical Presuppositions," *ACM Transactions on Computing Education*, 14(3), 2014.

Tenenberg, J. and McCartney, R. "Computing Education in (K-12) Schools from a Cross-National Perspective," *ACM Transactions on Computing Education*, 14(2), 2014.

Tenenberg, J. and Knobelsdorf, M. "Out of our minds: a review of sociocultural cognition theory," *Computer Science Education*, 24(1), 1-24, 2014.

Socha, D. and Tenenberg, J. "Navigating constraints: the design work of professional software developers. Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems, 2013.

Socha, D. and Tenenberg, J. "Sketching software in the wild." In *Proceedings of the 2013 International Conference on Software Engineering* (ICSE '13). IEEE Press, 1237-1240, 2013.

Knobelsdorf, M. and Tenenberg, J. "The Context-based Approach IniK in Light of Situated and Constructive Learning Theories", International Conference on Informatics in Schools: Situation, Evolution and Perspectives, Oldenburg, Germany, February 2013.

Tenenberg, J. "Technik und Commons." In Silke Helfrich, Heinrich-Bo¨ll-Stuftung(Hg.), *Commons: Für eine neue Politik jenseits von Markt und Staa*t, Transcript Publishing, 2012. (Transl: "Technology and the Commons." In Silke Helfrich and Heinrich-Böll Foundation, *Commons: For a new policy beyond market and state*, Transcript Publishing, 2012). Also appearing in English as "Technology and the Commons" in *The Wealth of the Commons: A World Beyond Market and State*, Levellers Press, 2012.

Knobelsdorf, M., Isohanni, E., and Tenenberg, J. "The Reasons Might be Different: Why Students and Teachers Do Not Use Visualization Tools", In Proceedings of the 12th Koli Calling International Conference on Computing Education Research (Koli Calling '12), Tahko, Finland, November, 2012.

Fincher, S., and Tenenberg, J. A *Commons Leader's Vade Mecum (or, How to Instantiate a Disciplinary Commons)*, University of Kent Press, 2011.

Fincher, S., Tenenberg, J., and Robins, A. "Research Design: Necessary Bricolage", The 7th International Computing Education Research Workshop (ICER 2011), Providence, Rhode Island, USA, August 2011. (Winner of the John Henry Award for the paper that "pushes the upper limits of our pedagogy.")

Tenenberg, J. and McCartney, R. "Computational tools for computing education." *ACM Transactions on Computing Education*, 11(4), 2011.

Josh Tenenberg, "Industry Fellows: A model for industry-academic collaboration in the engineering classroom." American Society for Engineering Education Annual Conference. Vancouver, B.C., Canada, June 2011.

Josh Tenenberg, "Using portfolios to tell the design backstory." American Society for Engineering Education Annual Conference. Vancouver, B.C., Canada, June 2011.

Boustedt, J., McCartney, R. Tenenberg, J., Cooper, S., Garcia, D., Hutton, M., Parlante, N., and Richards, B. "It seemed like a good idea at the time." SIGCSE '11: Proceedings of the 41st SIGCSE Technical Symposium on Computer Science Education. Dallas, TX, USA, March 2011.

Tenenberg, J. and McCartney, R. "Entry Points for Computing Education Research." *ACM Transactions on Computing Educaction* 11(1), 2011.

Lim, Y., Stolterman, E., and Tenenberg, J. "The Anatomy of Prototypes as a Framework for Specifying Fundamental Characteristics of Prototypes." Asian Conference on Design & Digital Engineering. Jeju, Korea, August 2010.

Fincher, S., and Tenenberg, J. "The scholarship of cockfighting." The London Scholarship of Teaching and Learning (SoTL) 8th International Conference, London, England, May 2010.

Tenenberg, J. and McCartney, R. "Why Discipline Matters in Computing Education Scholarship." *ACM Transactions on Computing Educaction* 9(4), 2010.

Tenenberg, J. "Industry fellows: bringing professional practice into the classroom." In SIGCSE '10: Proceedings of the 41st SIGCSE Technical Symposium on Computer Science Education, Milwaukee, WI, USA, March 2010.

Boustedt, J., McCartney, R., Tenenberg, J., Gehringer, E. F., Lister, R., and Musicant, D. "It seemed like a good idea at the time." In SIGCSE '10: Proceedings of the 41st SIGCSE Technical Symposium on Computer Science Education, Milwaukee, WI, USA, March 2010.

Shinohara, K. and Tenenberg, J. "A blind person's interactions with technology." *Communications of the Association for Computing Machinery* 52(8):58-66, 2009.

Tenenberg, J. "The ultimate guest speaker: a model for educator/practitioner collaboration." Eleventh Annual Northwestern Regional Conference Consortium for Computing Sciences in Colleges, Tacoma, WA, October 2009. Proceedings in *The Journal of Computing Sciences in Colleges*, 2009.

Tenenberg, J. and McCartney, R. "Introducing the ACM Transactions on Computing Education", *ACM Transactions on Computing Education*, 9(1), 2009.

Boustedt, J., McCartney, R., Tenenberg, J., Anderson, S. D., Eastman, C. M., Garcia, D. D., Gestwicki, P. V., and Menzin, M. S. "It seemed like a good idea at the time." In SIGCSE '08: Proceedings of the 39th SIGCSE Technical Symposium on Computer Science Education, 2008.

Tenenberg, J., Fincher, S., Impagliazzo, J., and Joyce, D. "Publishing in computing education." In SIGCSE '08: Proceedings of the 39th SIGCSE Technical Symposium on Computer Science Education, 2008.

Tenenberg, J., "The politics of technology and the governance of commons." The 12th Biennial Conference of the International Association for the Study of Commons, July, 2008, Cheltenham, England.

Tenenberg, J. and McCartney, R. "Answering Part of the Significant Question", *ACM Journal on Educational Resources in Computing*, 8(4), 2008.

McCartney, R. and Tenenberg, J. "Making it Real", *ACM Journal on Educational Resources in Computing*, 8(3), 2008.

Lim, Y., Stolterman, E., and Tenenberg, J. "The anatomy of prototypes: Prototypes as filters, prototypes as manifestations of design ideas." *ACM Transactions on Computer-Human Interaction* 15(2), 2008.

Tenenberg, J., "An institutional analysis of software teams." *International Journal of Human-Computer Studies* 66(7):484-494, 2008.

Tenenberg, J. and McCartney, R. "Grounding the Scholarship of Teaching and Learning in Practice", *ACM Journal on Educational Resources in Computing*, 8(2): 2008.

McCartney, R. and Tenenberg, J. "From Conference to Journal." *ACM Journal on Educational Resources in Computing*, 8(1): 2008.

Tenenberg, J. and McCartney, R. "Linking questions and evidence." *ACM Journal on Educational Resources in Computing*, 7(4), 2008.

Shinohara, K. and Tenenberg, J., "Observing Sara: A case study of a blind person's interactions with technology", ASSETS 2007: The Ninth International ACM SIGACCESS Conference on Computers and Accessibility, Tempe, AZ, USA, 2007.

Fincher, S. and Tenenberg, J., "Warren's Question", ICER '07: The Third International Computing Education Research Workshop, Atlanta, Georgia, USA, 2007.

Tenenberg, J. and Fincher, S. "Opening the Door of the Computer Science Classroom: The Disciplinary Commons", SIGCSE '07: Proceedings of the 38th SIGCSE Technical Symposium on Computer Science Education, 2007.

Boustedt, J., McCartney, R., Tenenberg, J., Winters, T., Edwards, S., Morrison, B. B., Musicant, D. R., Utting, I., and Zander, C. 2007. "It Seemed Like a Good Idea at the Time," SIGCSE '07: Proceedings of the 38th SIGCSE Technical Symposium on Computer Science Education, 2007.

Fincher, S. and Tenenberg, J. "Re-shaping practices of academic development: The Disciplinary Commons", Society for Research into Higher Education Annual Conference, Brighton, Sussex, UK, December, 2007.

McCartney, R. and Tenenberg, J. "From the Editors: A New Vision for JERIC," *ACM Journal on Educational Resources in Computing*, 7(1), 2007.

Tenenberg, J. and McCartney, R., "Computer Science in a Liberal Arts Context," *ACM Journal on Educational Resources in Computing*, 7(2), 2007.

McCartney, R. and Tenenberg, J. "Why Evidence?", *ACM Journal on Educational Resources in Computing*, 7(3), 2007.

Tenenberg, J. and Fincher, S. "Building and Assessing Capacity in Engineering Education Research: The Bootstrapping Model," American Society for Engineering Education Annual Conference, Chicago, IL, USA, June, 2006.

Fincher, S., Lister, R., Clear, T., Robins, A., Tenenberg, J. and Petre, M. "Multi-institutional, multi-national studies in CSEd research: some design considerations and trade-offs," First International Computing Education Research Workshop (ICER), Seattle, WA, USA, October, 2005.

Fincher, S. and Tenenberg, J. "Using Theory to Inform Capacity-Building: Communities of Practice in Engineering Education Research", *Journal of Engineering Education*, October, 2006.

Tenenberg, J. and Wang, Q. "Using course portfolios to create a disciplinary commons across institutions," Seventh Annual Northwestern Regional Conference of the Consortium for Computing Sciences in Colleges, Bothell, WA, October 2005.

Murphy, L. and Tenenberg, J. "Do Computer Science Students Know What They Know?: A Calibration Study of Data Structure Knowledge," SIGCSE Conference on Innovation and Technology in Computer Science Education (ITiCSE), Lisbon, Portugal, 2005.

Tenenberg, J. and Murphy, L. "Knowing what I know: an investigation of undergraduate knowledge and self-knowledge of Data Structures," *Computer Science Education*, 15(4), 2005.

Fincher, S. and Tenenberg, J. "Making sense of card sorting data," *Expert Systems*, 22(3), 89-93, 2005.

Sanders, K., S. Fincher, D. Bouvier, G. Lewandowski, B. Morrison, L. Murphy, M. Petre, B. Richards, J. Tenenberg, L. Thomas, R. Anderson, R. Anderson, S. Fitzgerald, A. Gutschow, S. Haller, R. Lister, R. McCauley, J. McTaggart, C. Prasad, T. Scott, D. Shinners-Kennedy, S. Westbrook, C. Zander, "A multi-institutional multinational study of programming concepts using card sort data," *Expert Systems*, 22(3), 89-93, 2005

Tenenberg, J., S. Fincher, K. Blaha, D. Bouvier, T. Chen, D. Chinn, S. Cooper, A. Eckerdal, H. Johnson, R. McCartney, A. Monge, J. Mostro¨m, M. Petre, K. Powers, M. Ratcliffe, A. Robins, D. Sanders, L. Schwartzman, B. Simon, C. Stoker, A. Elliott Tew, T. VanDeGrift, "Students Designing Software: a Multi-National, Multi-Institutional Study," *Informatics in Education*, 4(1), 143-162, 2005.

Fincher, S., M. Petre, J. Tenenberg, K. Blaha, D. Bouvier, T. Chen, D. Chinn, S. Cooper, A. Eckerdal, H. Johnson, R. McCartney, A. Monge, J. Mostro¨m, K. Powers, M. Ratcliffe, A. Robins, D. Sanders, L. Schwartzman, B. Simon, C. Stoker, A. Elliott Tew, T. VanDeGrift, "A multi-national, multi-institutional study of student-generated software designs", 4th Annual Finnish / Baltic Sea Conference on Computer Science Education, Koli Calling, Joensuu, Finland, 2004.

Lister, R., I. Box, B. Morrison, J. Tenenberg, S. Westbrook, "The Dimensions of Variation in the Teaching of Data Structures", 9th Annual Conference on Innovation and Technology in Computer Science Education (ITiCSE), Leeds, UK, 2004.

Chinn, D., J. Tenenberg and P. Prins, "The Role of the Data Structures Course in the Computing Curriculum", Fifth Annual Northwestern Regional Conference of the Consortium for Computing Sciences in Colleges, Ellensberg, WA, October 2003.

Collins, W., R. Lister, J. Tenenberg, and S. Westbrook, "The Role for Framework Libraries in CS2", in Proceedings of the 34th SIGCSE Technical Symposium on Computer Science Education, Reno, NV, U.S.A., 2003.

Tenenberg, J., "A Framework Approach to Teaching Data Structures", in Proceedings of the 34th SIGCSE Technical Symposium on Computer Science Education, Reno, NV, U.S.A., 2003.

Tenenberg, J., "Teaching Data Structures Using Object Oriented Toolkits", in Proceedings of the Ed- ucators' Symposium, ACM Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA), Seattle, WA, U.S.A., 2002.

Tenenberg, J., "On the meaning of computer programs", in Cognitive Technology: Instruments of Mind, Proceedings of the 4th International Conference of Cognitive Technology, Coventry, UK, 2001.

Tenenberg, J., "Virtual machines and program comprehension," Proceedings, Annual Meeting, Psychol- ogy of Programming Interest Group, Ghent, Belgium, 1996.

Yang, Q., Tenenberg, J. and Woods, S., "On the Implementation and Evaluation of Abtweak," Com- putational Intelligence, V.12, June 1996.

Tenenberg, J., "Using Cooperative Learning in the Undergraduate Computer Science Classroom," *The Journal of Computing in Small Colleges*, 11(2), 1995..

Whitehead, S., J. Karlsson, and J. Tenenberg, "Learning Multiple Goal Behavior via Task Decomposition and Dynamic Policy Merging," *Robot Learning*, Sridhar and Connel (eds.), MIT Press, 1993.

Tenenberg, J., J. Karlsson, and S. Whitehead, "Learning via Task Decomposition," Proceedings of the Second International Conference on Simulation of Adaptive Behavior (SAB92), 1992.

Knoblock, C., J. Tenenberg, and Q. Yang, "Characterizing Abstraction Hierarchies for Planning," Proceedings of the Ninth National Conference on Artificial Intelligence, 1991.

Allen, J., Kautz, H., Pelavin, R. and Tenenberg, J. *Reasoning about Plans*, Morgan Kaufmann, 1991.

Bacchus, F., J. Tenenberg, and H. Koomen, "A Non-Reified Temporal Logic," *Artificial Intelligence*, 52(1), 1991.

Tenenberg, J., "Abandoning the Completeness Assumptions: A Statistical Approach to Solving the Frame Problem," *The International Journal of Expert Systems*, 3(3-4), 1991. Reprinted in *Reasoning Agents in a Dynamic World: The Frame Problem*, K. Ford and P. Hayes (eds.), 1991

Tenenberg, J., "Abstracting First-Order Theories," First International Workshop on Change of Representation and Inductive Bias, Tarrytown. Published as *Change of Representation and Inductive Bias*, D. P. Benjamin (ed.), Kluwer Academic Publishers, Boston, 1990.

Knoblock, C., J. Tenenberg, and Q. Yang, "A Spectrum of Abstraction Hierarchies for Planning," Proceedings of the AAAI-90 Workshop on Automatic Generation of Approximations and Abstractions, 1990.

Yang, Q. and J. Tenenberg, "ABTWEAK: Abstracting a Non-Linear, Least Commitment Planner," Proceedings of the Eighth National Conference on Artificial Intelligence, 1990.

Tenenberg, J., "Extending Inheritance Abstraction to Symbolic Planning Systems," Research Review, 1988-1989, Computer Science and Engineering, University of Rochester, 1989.

Bacchus, F., J. Tenenberg, and H. Koomen, "A Non-Reified Temporal Logic," Proceedings of the First International Conference on Principles of Representation and Reasoning, Toronto, 1989.

Tenenberg, J., "Inheritance in Automated Planning," Proceedings of the First International Conference on Principles of Representation and Reasoning, Toronto, 1989.

Tenenberg, J., "The Robot Designer's Dilemma," Proceedings of the First International Conference on Human and Machine Cognition, Pensacola, Florida, 1989.

Tenenberg, J., "Abstraction in Planning," Ph.D. Dissertation and Technical Report #250, University of Rochester Computer Science Department, 1988.

Hartman, L. and J. Tenenberg, "Performance in Practical Problem Solving," Proceedings of the Tenth International Joint Conference on Artificial Intelligence, Milan Italy, 1987.

Tenenberg, J., "Preserving Consistency across Abstraction Mappings," Proceedings of Tenth Interna- tional Joint Conference on Artificial Intelligence, Milan Italy, 1987.

Tenenberg, J., "Planning with Abstraction," Proceedings of Fifth National Conference on Artificial Intelligence, Philadelphia, PA, 1986.

Tenenberg, J., "Taxonomic Reasoning," Proceedings of the Ninth International Joint Conference on Artificial Intelligence, Los Angeles, 1985.