# Forrest Stonedahl, Ph.D.

CURRENT POSITION

Assistant Professor of Computer Science

Augustana College Phone: (309) 794-7515

639 38th Street E-mail: forreststonedahl@augustana.edu Rock Island, IL 61201 Website: http://forrest.stonedahl.com

PREVIOUS POSITIONS

Centre College (Danville, Kentucky)

2011-2014

• Assistant Professor of Computer Science & Mathematics

RESEARCH INTERESTS

- Artificial Intelligence: evolutionary computation, multi-agent systems
- Complex Systems: agent-based modeling, emergence, social networks
- Computer Science Education: curriculum development, decentralized thinking

#### EDUCATION

# Northwestern University, Evanston, Illinois USA

Ph.D., Computer Science

2011

- Thesis: "Genetic Algorithms for the Exploration of Parameter Spaces in ABMs"
- Committee: Uri Wilensky (adv), William Rand, Doug Downey, Luis Amaral
- Cognitive Science Specialization Certificate

M.S., Computer Science

2008

- Advisor: Uri Wilensky
- Cumulative GPA: 3.96/4.00

### Carleton College, Northfield, Minnesota USA

B.A. Computer Science, Mathematics

2004

- Cumulative GPA: 3.96/4.00 (4.00 in majors)
- Summa Cum Laude
- Foreign Study: Budapest Semester in Mathematics

Fall 2003

# Manuscripts In Preparation

- Pierrehumbert, J.B., **Stonedahl, F.**, & Daland, R. (In preparation). A model of grassroots changes in linguistic systems. Manuscript under revision. Draft available: http://arxiv.org/abs/1408.1985
- Ottino-Löffler, B., **Stonedahl, F.**, Veetil, V.P., & Wilensky, U. (Submitted). A General Model of Spatial Competition. GMU Working Paper in Economics No. 15-62. Available at SSRN: http://ssrn.com/abstract=2697263

PEER REVIEWED JOURNAL & CONFERENCE PAPERS

- Stonedahl, F., Stonedahl, S.H., Cheboi, N., Tazyeen, D., & Devore, D. (2017). Novelty and Objective-based Neuroevolution of a Physical Robot Swarm. Proceedings of the 9th International Conference on Agents and Artificial Intelligence (ICAART 2017). February 24-26. Porto, Portugal.
- Stonedahl, S.H., Roche, K. R., **Stonedahl, F.**, & Packman, A. I. (2015). Visualizing Hyporheic Flow Through Bedforms Using Dye Experiments and Simulation. *JoVE* (*Journal of Visualized Experiments*), (105) e53285. doi:10.3791/53285
- Lee, J., Filatova, T., Ligmann-Zielinska, A., Hassani-Mahmooei, B., Stonedahl, F., Lorscheid, I., Voinov, A., Polhill, G., Sun, Z., & Parker, D.C. (2015) 'The Complexities of Agent-Based Modeling Output Analysis' Journal of Artificial Societies and Social Simulation 18 (4) 4 doi: 10.18564/jasss.2897
- Monical, C.\* & **Stonedahl, F.** (2014). Static vs. Dynamic Populations in Genetic Algorithms for Coloring a Dynamic Graph. *Proceedings of the 2014 Conference on Genetic and Evolutionary Computation (GECCO '14)*. July 12-16. Vancouver, B.C., Canada.
- Stonedahl, F. & Stonedahl, S.H. (2012). Darwinian Rivers: Evolving Stream Topographies to Match Hyporheic Residence Time Distributions. *Proceedings of the 14th International Conference on Genetic and Evolutionary Computation (GECCO '12)*. July 7-11. Philadelphia, PA.
- Stonedahl, F. & Rand, W. (2012). "When Does Simulated Data Match Real Data? Comparing Model Calibration Functions using Genetic Algorithms." *Proc. of the 4th World Congress on Social Simulation (WCSS 2012)*. Sept. 4-7. Taipei, Taiwan.
- Anderson, D., Dellarocas, C., Katona, Z., Rand, W., & **Stonedahl, F.** (2011). "News, Networks and Users: How Network Properties affect Online News Consumption." Conference on Information Systems and Technology (CIST 2011). November 12-13, Charlotte, NC.
- Stonedahl, F., & Wilensky, U. (2010). Evolutionary Robustness Checking in the Artificial Anasazi Model. In *Proceedings of the AAAI Fall Symposium on Complex Adaptive Systems: Resilience, Robustness, and Evolvability.* November 11-13, 2010. Arlington, VA.
- Stonedahl, F., Rand, W., & Wilensky, U. (2010). Evolving Viral Marketing Strategies. Proceedings of the 12th Annual Conference on Genetic and Evolutionary Computation (GECCO '10). July 7-11. Portland, OR.
- Stonedahl, F. & Stonedahl, S.H. (2010). Heuristics for Sampling Repetitions in Noisy Landscapes with Fitness Caching. *Proceedings of the 12th Annual Conference on Genetic and Evolutionary Computation (GECCO '10)*. July 7-11. Portland, OR.
- Stonedahl, F., Rand, W., & Wilensky, U. (2008). CrossNet: A Framework for Crossover with Network-based Chromosomal Representations. *Proceedings of the Genetic and Evolutionary Computation Conference (GECCO '08)*, pp. 1057–1064, July 12-16, Atlanta, GA, USA.
- Rand, W., & Stonedahl, F. (2007). The El Farol Bar Problem and Computational Effort: Why People Fail to Use Bars Efficiently. Proceedings of the Agent 2007 Conference, Nov. 15-17, Chicago, IL, USA.
- Sondahl<sup>†</sup>, F., Tisue, S. & Wilensky, U. (2006). Breeding Faster Turtles: Progress towards a NetLogo Compiler. *Proceedings of the Agent 2006 Conference*, Sept. 21-23, Chicago, IL, USA.

<sup>\*</sup>Student research advisee.

<sup>&</sup>lt;sup>†</sup>My surname changed from Sondahl to Stonedahl as a result of my marriage in 2007.

#### EDITED BOOK CHAPTERS

- Stonedahl, F., & Rand, W. (2014). When Does Simulated Data Match Real Data? Comparing Model Calibration Functions using Genetic Algorithms. In *Advances in Computational Social Science: The Fourth World Congress*, C. Tai, S. Chen, T. Ternao, & R. Yamamoto (eds). Agent-Based Social Systems, vol. 11. pp. 297-313. Springer-Verlag. ISBN: 978-4-431-54846-1.
- Stonedahl, F., & Wilensky, U. (2011). Finding Forms of Flocking: Evolutionary Search in ABM Parameter-Spaces. *Multi-Agent-Based Simulation 2010*, T. Bosse, A. Geller, & C. M. Jonker (Eds). Lecture Notes in Artificial Intelligence 6532. pp. 61–75. Springer, Heidelberg.
- Stonedahl, F., Wilkerson-Jerde, M. & Wilensky, U. (2011). MAgICS: Toward a Multi-Agent Introduction to Computer Science. In M. Beer, M. Fasli, & D. Richards (Eds.), Multi-Agent Systems for Education and Interactive Entertainment: Design, Use and Experience. IGI Global.

# PEER REVIEWED WORKSHOP PAPERS

- Stonedahl, F. & Wilensky, U. (2010). Finding Forms of Flocking: Evolutionary Search in ABM Parameter-Spaces. Proceedings of the MABS workshop at the Ninth International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS '10). May 11. Toronto, Canada.
- Stonedahl, F., Wilkerson-Jerde, M., & Wilensky, U. (2009) "Re-conceiving Introductory Computer Science Curricula through Agent-Based Modeling." Workshop on Educational Uses of Multi-Agent Systems at the Autonomous Agents and Multi-Agents Systems Conference (AAMAS '09), May 12. Budapest, Hungary. pp. 63-70.
- Stonedahl, F., Rand, W. & Wilensky, U. (2008). Multi-Agent Learning with a Distributed Genetic Algorithm: Exploring Innovation Diffusion on Networks. ALA-MAS+ALAg Workshop at the Autonomous Agents and Multi-Agents Systems Conference (AAMAS '08), May 12-16, Estoril, Portugal.

#### RESEARCH PRESENTATIONS

- Stonedahl, F., Ottino-Löffler, B., Veetil, V.P., & Wilensky, U. (2015) An Agent-Based Model of Spatial Competition in Markets. Presented at the 7th annual Complexity in Business Conference. November 13, 2015. Washington, D.C.
- Stonedahl, S.H., Gibson, C., Reiter, C., Stonedahl, F., & Sawyer, A. H. (2015)
   Impact of Spatial Permeability Distribution Characteristics on Hyporheic Flow Using a Physical System and Simulations. Abstract H31K-02, American Geophysical Union Fall Meeting, December 16, 2015. San Francisco.
- Stonedahl, F. (2014) "Games, Geese, and Good Marketing." *Invited research seminar at Augustana College.* January 30, 2014. Rock Island, IL.
- Stonedahl, S.H., Cooper, D. G., Everingham, J. M., Kraciun, M. K., & Stonedahl,
   F. (2012) Quantifying the impact on hyporheic flow of assuming homogenous hydraulic conductivity distributions within permeameters. Abstract H13I-06, American Geophysical Union Fall Meeting, December 3, 2012. San Francisco.
- Stonedahl, F. (2011) Query-Based Model Exploration: Parameters and Paradigms. Invited seminar speaker at the *Center for the Study of Complex Systems* at the University of Michigan. November 14, 2011. Ann Arbor, Michigan.

- Stonedahl, S.H. & **Stonedahl**, **F.** (2011) Think-Tac-Toe: When are puzzles solvable? In the *Recreational Mathematics: New Problems and New Solutions* contributed papers session at the MAA MathFest 2011. August 5-6, Lexington, KY.
- Rand, W., **Stonedahl, F.**, & Wilensky, U. (2011) Evolving Viral Marketing Strategies. Presented by Rand at the *Advanced Research Techniques Forum*, June 5-8, Desert Springs, CA.
  - **Stonedahl, F.** & Mitchell, S. (2011) "Background & Overview of the Artificial Anasazi Model." (Invited Session Facilitator.) *Epistemology of Modeling and Simulation Conference*. April 1-3. Pittsburgh, PA.
- Stonedahl, F. (2011) Invited "Fireside Chat" research presentation at the Ayers College of Commerce and Industry (residential college), Northwestern University, Evanston, IL. Jan. 19, 2011.
- Stonedahl, F. (2009) "NetLogo: Meditations on a Tool for Learning and Modeling." [invited plenary presentation]. Workshop on Educational Uses of Multi-Agent Systems at the AAMAS '09 conference, May 12. Budapest, Hungary.
- Stonedahl, F., Kornhauser, D., Russell, E., Brozefsky, C., Verreau, E., Tisue, S. & Wilensky, U. (2008). "Tinkering with Turtles: An Overview of NetLogo's Extensions API." Presentation at the Swarmfest 2008 Conference, May 11-13. Chicago, IL.
- Sondahl<sup>†</sup>, F. & Rand, W. (2007). "Multi-agent Communication Disorders: Dynamic Breeding Networks in Genetic Algorithms". *Presentation at the Swarmfest 2007 Conference*, DePaul University, July 12-14. Chicago, IL, USA.

#### Conference Posters

- Stonedahl, S.H. & Stonedahl, F., (2016). Teaching Hyporheic and Groundwater Flow Concepts Using an Interactive Computer Simulation. Abstract ED11B-0899, American Geophysical Union Fall Meeting, December 12. San Francisco, CA.
- Sward, A, **Stonedahl, F.**, & Stonedahl, S. H. (2016) Gotta catch em all: Pursuit curves for accelerating prey. MathFest. August 3-6, 2016 Columbus, OH.
- Wojcinski, E.\*, & O'Brien, K.\*. (2015). Agent-Based Modeling of Ebolavirus in Sierra Leone. Celebration of Learning Student Research Symposium. May 6, 2015. Augustana College.
- Borg, K. T., Stonedahl, S. H., Stonedahl, F. (2014). Unique Solvability of Certain Grid-based Logic Puzzles. Sixth Annual Illinois-Iowa ACS Undergraduate Research Conference. November 15, 2014. Davenport, IA.
- Stonedahl, S.H., Stonedahl, F., Lohberg, M., Lusk, K. and Miller, M. (2013).
   Photogrammetric Method and Software for Stream Planform Identification. Abstract H43E-1506, American Geophysical Union Fall Meeting. Dec. 12, 2013. San Francisco.
- Lohberg, M.\*, Lusk, K., Miller, D., **Stonedahl, F.** and Stonedahl, S. H. (2013). Investigating Methods of Stream Planform Identification. Abstract ED33D-0794, American Geophysical Union Fall Meeting. Dec. 11, 2013. San Francisco.

<sup>\*</sup>Presented by undergraduate student research advisee.

- Lusk, K.\*, Lohberg, M., Miller, D., Stonedahl, F., and Stonedahl, S. H. (2013). Investigating Photogrammetric Methods for Stream Planform Identification. Fifth Annual Illinois-Iowa ACS Undergraduate Research Conference. November 16, 2013. Davenport, IA.
- Stonedahl, F., Rand, W., & Anderson, D. (2011) When Does Simulated Data Match Real Data?: Exploring Model Calibration Functions using Evolutionary Computation. Poster presented at the 13th Annual Conference on Genetic and Evolutionary Computation (GECCO '11). July 12-16. Dublin, Ireland.
- Ottino-Löffler, J.\* & Stonedahl, F. (2011). "An Agent-Based Model of Polarization in Political Networks." Best Student Poster Award, Presented at the 2011 Complexity Conference, March 6-7. Northwestern University, Evanston, IL.
- Stonedahl, F. (2011). "Evolutionary Robustness Checking in the Artificial Anasazi Model" Presented at the 2011 Complexity Conference, March 6-7. Northwestern University, Evanston, IL.
- Stonedahl, F., Rand, W., & Wilensky, U. (2010). "Discovering Viral Marketing Strategies for Social Networks." Poster presented at the Workshop on Information in Networks (WIN 2010). Sept. 24-25. New York University, Stern School of Business, New York, NY, USA.
- Stonedahl, F. (2009). "Evolutionary exploration of parameter spaces in agentbased models: A case study in flocking behavior." Poster presented at the NICO Complexity Conference, Sept. 1-3. Northwestern University, Evanston, IL, USA.
- Stonedahl, S.H. & Stonedahl, F. (2009). "Quantifying Fitness Landscapes Robustness to Noise and Uncertainty." Poster presented at the NICO Complexity Conference, Sept. 1-3. Northwestern University, Evanston, IL, USA.
- Sondahl<sup>†</sup>, F. & Rand, W. (2007). "Evolution of Non-Uniform Cellular Automata using a Genetic Algorithm: Diversity and Computation". Poster presented at the Genetic and Evolutionary Computation Conference (GECCO '07), July 7-11, London, UK.

UNDERGRADUATE Research Advising

- Advisees for undergraduate student projects:
  - David Devore, Danya Tazyeen, Nelly Cheboi multi-agent robotics
  - Caleb Gibson, Caleb Reiter (USRI @ SAU.) heterogeneous sediment simulation
  - Ethan Wojcinski, Katie O'Brien Ebola outbreak modeling
  - Lindsey Pack, Siruo Wang Markov models/clustering of ABM data
  - Michael duPont, Zach Trette robotic theater/drama

  - Jeff Elam, Brooks Johnson, Cyrus Xi, John Kehr GPS messaging app.
  - Michelle Lohberg, Kyle Lusk, David Miller (USRI @ St. Ambrose Univ.) stream planform photogrammetry
  - Cara Monical (J.C.Y. scholar) genetic algorithms for dynamic graph coloring
  - Matthew Gidcomb NLP/text analysis of political speech
  - ${\it 3-D \ agent-based \ model \ visualization}$ • Sergey Krilov & Rumou Duan
  - Jules Ottino-Löffler political economics simulation
  - Daniel Kim & Wenhao Sun agent-based hydrogen desorption model
  - Bertrand Ottino-Löffler modeling competition in economic markets
  - Greg McGlynn (Murphy scholar) parapatric speciation model

# EDUCATIONAL Presentations & Seminars

- Stonedahl, S.H., Reiter, C, & Stonedahl, F., "Introducing Computer Programming into a Projectile Motion Lab", American Association of Physics Teachers (Iowa Section), Central Academy, Des Moines, IA. Nov. 7, 2015.
- Stonedahl, F. & Stonedahl, S.H. "Puzzles and proofs: an adventure in logic, linear algebra, and graph theory", Invited presentation, Engineering and Physics Departmental Seminar, St. Ambrose University. Oct. 7, 2015.

### Teaching EXPERIENCE

# Augustana College (assistant professor)

$\bullet$ CSC-INTR: Internship with web startup	Winter 2016-17
$\bullet$ CSC 399: [I.S.]* Unsupervised ML	Winter 2016-17
• CSC 490: Senior Inquiry [project course]	Spring 15,16, Winter 16-17
• CSC 330: Computer Architecture	Winter 2016-17
$\bullet$ CSC 211: Introduction to Computer Science I	Winter 14-15,15-16, Fall 2016
• CSC 285: Software Development	Fall 2014, 2015, 2016
• CSC 332: Operating Systems	Spring 2016
• CSC 320: Principles of Artificial Intelligence	Winter 2015-16
• CSC 399: [I.S.] Coding Challenges	Fall 2015
• Summer Academy: Art, Science & Industry of	Coding Summer 2015
• CSC 121: Explorations in Computing	Fall 2014, Spring 2014, Fall 2015
• CSC 400: [I.S.] Prolog Language	Spring 2015
• CSC 399: [I.S.] Ebola Modeling	Winter 2014-15

#### Centre College (assistant professor)

Spring 2014
Spring 2012, 2014
Fall 2013, Spring 2013, 2014
Jan. 2012, Jan. 2014
Fall 2013
Fall 2013
Fall 2013
Fall 2013, Fall 2011
2012-2013
Spring 2013
Spring 2013, Spring 2012

<sup>\*[</sup>I.S.] = Independent/Directed Study

• CSC 402: [I.S.] Political Debate Text Analysis	Fall 2012
• CSC 400: [I.S.] Functional Programming in Scala	Fall 2012
• CSC 341: Principles of Programming Languages	Fall 2012
• MAT 140: Differential Calculus with Review	Fall 2012
• CSC 401: [I.S.] Computational/Neural Modeling	Fall 2011
• CSC 334: Theoretical Foundations of Computer Science	Fall 2011

#### Northwestern University (teaching assistant)

(teaching assistant)	
• EECS 372/472: Designing and Constructing Models with a Multi-Agent Language	Spring 2009, 2011
• EECS 111: Fundamentals of Computer Programming	Fall 2007, 2010
• EECS 349: Machine Learning	Fall 2009
• EECS 395-20: Intermediate Computer Graphics	Winter 2008
• EECS 395-24: Comp. Graphics & Movie Merge Algorithms	Winter 2008

#### **Instructional Tutorials**

- Stonedahl, F. "Hour of Code", Introductory programming workshop. Math and Computer Science Dept. Seminar, Augustana College. December 2015
- Stonedahl, F., Weintrop, D., Blikstein, P. & Shannon, C. "NetLogo: Teaching with Turtles and Crossing Curricular Boundaries". Workshop at 44th ACM Technical Symposium on Computer Science Education (SIGCSE). Denver, CO. March 2013
- Stonedahl, F. & Stonedahl, S.H. "Introduction to Multi-Agent Computer Simulation using NetLogo". Summer Research Institute Workshop at St. Ambrose University. Davenport, IA.

  July 2012
- Rand, W., Stonedahl, F., & Kornhauser, D. (2009). "Complex Adaptive Systems Tutorial: Agent-Based Modeling." Assistant instructor. AAAI Fall Symposium. Arlington, VA, USA.
- Stonedahl, F., & Wilkerson-Jerde, M. "Constructing, Analyzing and Critiquing Agent-Based Models". Co-leader. Tutorial at the NICO Complexity Conference, Northwestern University, Evanston, IL, USA.

  Sept. 2009
- Unterman, J., & **Stonedahl, F.** "Intro. to Agent-Based Modeling using NetLogo." Co-leader. Tutorial at *Swarmfest 2007 conference*, Chicago, IL, USA. *July 2007*
- "Introduction to Agent-Based Modeling using NetLogo." Assistant Instructor. Workshop at the Agent 2006 conference. Chicago, IL, USA. Sept. 2006
- "NetLogo Workshop for Texas Instruments' Educators". Assistant Instructor. Northwestern University, Evanston, IL, USA.

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# Teaching Young Students / Outreach

reaching roung students / Outreach	
• STEM outreach booth volunteer at IA state fair	2013
• Judge for First Lego League Qualifier, Quad Cities	Dec. 2012
• McCormick annual Career Day for Girls outreach program for 6-12th grade girls. Co-led research demos/hands-on activities.	2009-2011
• Northwestern University annual Take Our Daughters to Work Day. Led and/or assisted with computer programming tutorial.	2007-2009
• Constructing For Learning club: robotics & technology demos at the RefugeeOne youth outreach program.	2010
<ul> <li>North Shore Home Educators MATHCOUNTS program for middle school students. Instructor &amp; coach.</li> <li>→ 5th Place Team at the 2011 Illinois State Competition</li> </ul>	2008-2011
$\bullet$ North Shore Home Educators Math Olympiad program for elementary & middle school students. Instructor.	2006-2008
<ul> <li>Augustana College</li> <li>New Faculty Research Award: Simulation Software Devel. (\$2700)</li> <li>Faculty-Student Summer Partner Grant: Evolving Robot Team (\$1320)</li> <li>Course Adaptation Award: Blended Learning for CSC 211 (\$1500)</li> <li>New Faculty Research Award: Multiagent Robots (\$3950)</li> <li>Centre College</li> <li>Associated Colleges of the South (ACS) Faculty Advancement Grant, "An ACS-wide Conversation about MOOCs and the Liberal Arts", \$100.</li> <li>Proposal for special institutional funds to purchase 3-D printer. \$4,430.</li> <li>Centre College Summer Research Grant, (Faculty Development Communicate mining for political debate analysis", \$4000</li> </ul>	2015-16 2014-15 , Co-PI 10,000 2013 30 2012
Northwestern University  • Quest HPCC allocation (co-wrote with advisor), 250K CPU-hours  • Murphy Society grant (co-wrote with advisor), \$69,000  • Student travel grants/awards (from NU, AAAI, ACM), $\approx$ \$4,000  • First place prize, $Art$ of $Evolution$ exhibition  • First place prize, NetLogo Annual Pi Day Contest  • William Cabell Fellowship	2010-2011 2009-2011 February 2009 March 2008 2005-2006
<ul> <li>Carleton College</li> <li>Distinction in Math &amp; Computer Science senior projects</li> <li>Phi Beta Kappa &amp; Sigma Xi</li> <li>National Merit Scholarship Recipient</li> <li>Noyes Prize recipient</li> <li>Exemplary Writing Portfolio award</li> <li>Annual Dean's List</li> </ul>	2004 2003-2004 2000-2004 Sept. 2003 June 2001 2000-2004

Grants, Honors

& Awards

Professional Experience & Service

Service at Augustana College	
• Member, Educational Policy Committee	2015-present
• Member, Augustana Future Initiatives Think Tank (A-FITT)	2016-present
Member, CORE Faculty Advisory Board	2014-present
Coach, ACM Programming Contest Team	2014-present
• Faculty mentor, Augustana Photography Club	2014-present
• First Year Advisor	2015-2016
• Coach, William Lowell Putnam Competition	2014
Member, Sigma Xi Chapter	2014-present
• Member, Phi Beta Kappa Chapter	2014-present
Service at Centre College	
• Treasurer, Phi Beta Kappa, Beta Chapter of Kentucky	2013-2014
• Assistant coach, ACM programming team, Centre College (2011-2	•
• Chair, Instructional and Technology Resources Committee	2013-2014
• Steering Committee member	2013-2014
• Mellon Grant working group on UG research in the curriculum	2013-2014
• Chair, Computational Science Minor Investigation Committee	2012-2014
• Undergraduate Research Committee member	2012-2014
• Institutional Review Board member	2012-2014
• Mathematical Association of America liaison	2011-2013
• College Council member	2012-2013
External Service & Activities	
• Reviewer for PLoS-ONE	2011,2015
• Program committee, GECCO conference	2012-2016
• Program committee for Computational Social Science Society of	
conference.	2015
• Attended the ACS Focus Forum on Adult Education & Blended L	
• Editorial Review Board member, SAGE Open	2013
• Article editor for SAGE Open	2013,2015
• Reviewer for the journal Environment and Planning B	2013
• ECoMASS Workshop Chair (at GECCO Conference)	2011-2013
_ ,	012-2013,2016
• Program committee, Int'l Conf. on Interaction Design and Children	
• Program committee, AAAI Fall Symposium on Complex Adaptive	
• Reviewer for ASME Int'l Design Engineering Technical Conference	*
Computers and Information in Engineering Conference (CIE)	2009
• Affiliate Researcher, Smith School of Business, Univ. of Maryland	
• Association for Computing Machinery (ACM) Member	2008-present
• ACM undergraduate chapter treasurer	2002-2003
• Association for the Advancement of A.I. (AAAI) member	2009-2011
• Swarm Development Group member	2010-2011
• NICO reading group member, leader (2010-2011)	2006-2011

# TECHNICAL SKILLS

 $\begin{tabular}{ll} \textbf{Languages:} & Java, Python, NetLogo, Meta/Scheme/Lisp, C/C++, Linux bash/shell, Matlab, Scala, Javascript/HTML/CSS \end{tabular}$ 

**Tools:** Eclipse, SciPy, LATEX, gnuplot, git/GitHub, SVN, POV-Ray, ZCorp 3-D printing, OpenPBS/Torque (HPCC job scheduling), and a few other abstruse acronyms.

# Random / Trivia

- Stonedahl, F. (2015) Cover Artwork. An Introduction to Agent-Based Modeling. Textbook authored by Wilensky, U. & Rand, W. MIT Press.
- Stonedahl, F. (2012). Cover Artwork. Mechanical Engineering Magazine. Published by the American Society of Mechanical Engineers. Vol. 134, No. 3. March 2012.
- In my free time (which seems all too rare lately), I enjoy birding, crocheting, photography, baking banana bread, playing the piano, downhill skiing, and creating math puzzles and logic riddles.
- In 2005, I starred in an instructional DVD about learning to hand-throw pottery.
- In 2004, I was captain of the IM "broomball" team that won the team spirit award.
- In 2004, I wrote a play entitled "Granny Wolfe" (a modern-day version of *Little Red Riding Hood*), which was publicly performed.
- From 2002 to 2004, I served as President of the Carleton College Croquet Society.
- In 2003, I scored 38 points on the William Lowell Putnam exam, ranking 137.5 out of 3615 undergraduate mathematicians competing.
- As a youth, I had a pet rabbit that lived on the roof.