### Curriculum Vitae: Vincent A. Cicirello, Ph.D.

### **Current Position and Contact Information**

Current Position: Professor of Computer Science and Information Systems

[Additional faculty affiliation: Behavioral Neuroscience]

Work Address: School of Business Office Phone: (609) 626-3526

Stockton University E-mail: Vincent.Cicirello@stockton.edu URL: http://www.cicirello.org/

**Education** 

Ph.D. 2003 Ph.D. in Robotics, Carnegie Mellon University (July 2003)

Thesis Title: Boosting Stochastic Problem Solvers Through Online Self-Analysis of Performance

M.S. in Computer Science, Drexel University (June 1999)

Thesis Title: Intelligent Retrieval of Solid Models

B.S. in Computer Science / B.S. in Mathematics, Drexel University (June 1999)

Summa Cum Laude (Overall GPA: 3.98, GPA in Computer Science: 4.0, GPA in Math: 4.0)

### **Research Interest Keywords**

Applied Artificial Intelligence, Computer Aided Engineering, Computer Science Education, Evolutionary Computation, Genetic Algorithms, Machine Learning, Metaheuristics, Multi-Agent Systems, Scheduling, Swarm Intelligence

### **Teaching Interest Keywords**

Artificial Intelligence, Data Structures & Algorithms, Discrete Mathematics, Software Engineering

**Highlights** Designated an ACM Senior Member in 2011.

Recipient of a U.S. Patent in 2010.

Recipient of the 2005 AAAI Outstanding Paper Award.

Nominated for the GECCO 2006 Best Genetic Algorithm Paper.

Author of over 50 publications.

PI or Co-PI on over \$600K in external funding.

Conference chair, track chair, subcommittee chair, other special role, or program committee mem-

ber for more than 40 conferences (23 in past 5 years).

Reviewer for an additional 25 conferences (13 in past 5 years), and several journals.

**Bibliometrics** h-index: 23

g-index: 38 i10-index: 28

citation count: 1509

5 year citation count: 444

### **Employment History**

### **Full-Time Faculty Positions**

9/2014-present	<ul> <li>Professor, Computer Science &amp; Information Systems, Stockton University</li> <li>Also affiliated with the interdisciplinary minor in Behavioral Neuroscience (since 2010); and the Computational Science Program (since 2007).</li> </ul>
9/2010-8/2014	Associate Professor, Computer Science & Information Systems, Stockton University
9/2005-8/2010	Assistant Professor, Computer Science & Information Systems, Stockton University
7/2003-8/2005	Research Scientist, Department of Computer Science, College of Engineering, Drexel University
Academic Administrative Positions, Roles, and Experience	

9/2012-8/2016	Program Coordinator, Computer Science & Information Systems, Stockton University
9/2014-6/2015	Faculty Administrative Fellow, Stockton University

### **Academic Visiting Positions**

1/2012-8/2012 Visiting Associate Professor, Drexel University (Sabbatical from Stockton University)

- Geometric & Intelligent Computing Laboratory
   The Applied Communications and Information Networking (ACIN) Center

### **Full-Time Industry Positions**

3/1997-4/1998	Software Engineer, Knight-Ridder Mediastream, Philadelphia, PA	
9/1995-3/1996	Computer Programmer, Automatic Data Processing, Mt. Laurel, NJ	

### **Other Academic Positions**

6/2004-8/2005	Adjunct Professor, Department of Computer Science, Drexel University
8/1999-7/2003	Graduate Research Fellow, The Robotics Institute, Carnegie Mellon University
1/2001-5/2001	Teaching Assistant, The Robotics Institute, Carnegie Mellon University
1/1998-8/1999	Research Assistant, Geometric and Intelligent Computing Laboratory, Drexel University
9/1996-1/1997	Teaching Assistant, Department of Mathematics and Computer Science, Drexel University

### **Publications**

#### Theses

Vincent A. Cicirello. *Boosting Stochastic Problem Solvers Through Online Self-Analysis of Performance*. PhD thesis, The Robotics Institute, School of Computer Science, Carnegie Mellon University, Pittsburgh, PA, July 2003. Also available as technical report CMU-RI-TR-03-27.

Vincent A. Cicirello. Intelligent retrieval of solid models. Master's thesis, Department of Mathematics and Computer Science, Drexel University, Philadelphia, PA, June 1999.

#### **Patent Grants**

William C. Regli and Vincent A. Cicirello. Method for comparing solid models. U.S. Patent #7,761,265, July 2010.

### Journal Articles (Refereed)

Vincent A. Cicirello. The permutation in a haystack problem and the calculus of search landscapes. *IEEE Transactions on Evolutionary Computation*, 20(3):434–446, June 2016.

Vincent A. Cicirello and William C. Regli. A flexible and extensible approach to automated cad/cam format classification. *Computers & Graphics*, 37(5):484–495, August 2013. Special Section on 3D Object Retrieval.

Vincent A. Cicirello. A cs unplugged activity for the online classroom. *Journal of Computing Sciences in Colleges*, 28(6):162–168, June 2013.

Vincent A. Cicirello. Experiences with a real projects for real clients course on software engineering at a liberal arts institution. *Journal of Computing Sciences in Colleges*, 28(6):50–56, June 2013.

Vincent A. Cicirello. Collective bin packing: An active learning exercise. *Journal of Computing Sciences in Colleges*, 24(6):117–123, June 2009.

Vincent A. Cicirello. On self-selected pairing in cs1: Who pairs with whom? *Journal of Computing Sciences in Colleges*, 24(6):43–49, June 2009.

Vincent A. Cicirello. An interdisciplinary course on artificial intelligence designed for a liberal arts curriculum. *Journal of Computing Sciences in Colleges*, 23(3):120–127, January 2008.

Joseph Kopena, Evan Sultanik, Gaurav Naik, Iris Howley, Maxim Peysakhov, Vincent A. Cicirello, Moshe Kam, and William Regli. Service-based computing on manets: Enabling dynamic interoperability of first responders. *IEEE Intelligent Systems*, 20(5):17–25, September/October 2005. Special Issue on Artificial Intelligence for Homeland Security.

Vincent A. Cicirello and Stephen F. Smith. Enhancing stochastic search performance by value-biased randomization of heuristics. *Journal of Heuristics*, 11(1):5–34, January 2005.

Vincent A. Cicirello, Max Peysakhov, Gustave Anderson, Gaurav Naik, Kenneth Tsang, William C. Regli, and Moshe Kam. Designing dependable agent systems for mobile wireless networks. *IEEE Intelligent Systems*, 19(5):39–45, September/October 2004. Special Issue on Dependable Agent Systems.

Vincent A. Cicirello and Stephen F. Smith. Wasp-like agents for distributed factory coordination. *Autonomous Agents and Multi-Agent Systems*, 8(3):237–266, May 2004.

Vincent A. Cicirello and William C. Regli. An approach to a feature-based comparison of solid models of machined parts. *AI EDAM: Artificial Intelligence for Engineering Design, Analysis and Manufacturing*, 16(5):385–399, November 2002.

William C. Regli and Vincent A. Cicirello. Managing digital libraries for computer-aided design. *Computer-Aided Design*, 32(2):119–132, February 2000.

### Refereed Conference Proceedings: Paper Awards or Award Nominations

Vincent A. Cicirello. Non-wrapping order crossover: An order preserving crossover operator that respects absolute position. In *Proceedings of the Genetic and Evolutionary Computation Conference (GECCO'06)*, volume 2, pages 1125–1131. ACM Press, July 2006. Seattle, WA. Nominated for the Genetic Algorithms Track Best Paper Award.

Vincent A. Cicirello and Stephen F. Smith. The max *k*-armed bandit: A new model of exploration applied to search heuristic selection. In *The Proceedings of the Twentieth National Conference on Artificial Intelligence*, volume 3, pages 1355–1361. AAAI Press, July 2005. Pittsburgh, PA. Acceptance rate: 18% (148/803). Winner of the AAAI'05 Outstanding Paper Award.

### Refereed Proceedings of Conferences, Symposia, and Workshops

Vincent A. Cicirello. Genetic algorithm parameter control: Application to scheduling with sequence-dependent setups. In *Proceedings of the 9th EAI International Conference on Bioinspired Information and Communications Technologies*, pages 136–143. ICST, December 2015. New York, NY.

Vincent A. Cicirello. On the effects of window-limits on the distance profiles of permutation neighborhood operators. In *Proceedings of the 8th International Conference on Bio-inspired Information and Communications Technologies*, pages 28–35. ICST, December 2014. Boston, MA.

Vincent A. Cicirello and Robert Cernera. Profiling the distance characteristics of mutation operators for permutation-based genetic algorithms. In *Proceedings of the Twenty-Sixth International Florida Artificial Intelligence Research Society Conference*, pages 46–51. AAAI Press, May 2013. St. Pete's Beach, Florida. Acceptance rate: 36.5% (27/74).

Vincent A. Cicirello. Heuristic sequencing crossover: Integrating problem dependent heuristic knowledge into a genetic algorithm. In *Proceedings of the Twenty-Third International Florida Artificial Intelligence Research Society Conference, FLAIRS-23*, pages 14–19. AAAI Press, May 2010. Daytona Beach, Florida. Acceptance rate: 37.9% (22/58).

Vincent A. Cicirello. On the role and effectiveness of pop quizzes in cs1. In *Proceedings of the 40th ACM Technical Symposium on Computer Science Education, SIGCSE'09*, pages 286–290. ACM Press, March 2009. Chattanooga, TN. **Acceptance rate: 33% (100/302).** Also published in *ACM SIGCSE Inroads*, 41(1):286–290, March 2009.

Vincent A. Cicirello. Weighted tardiness scheduling with sequence-dependent setups: A benchmark problem for soft computing. In *Applications of Soft Computing: Updating the State of the Art*, volume 52 of *Advances in Soft Computing*, pages 189–198. Springer, 2009.

Vincent A. Cicirello. The challenge of sequence-dependent setups: Proposal for a scheduling competition track on one machine sequencing problems. In *Proceedings of the International Conference on Automated Planning and Scheduling (ICAPS) Workshop on Scheduling a Scheduling Competition*. AAAI Press, September 2007. Providence, RI.

Vincent A. Cicirello. On the design of an adaptive simulated annealing algorithm. In *Proceedings of the International Conference on Principles and Practice of Constraint Programming First Workshop on Autonomous Search*. AAAI Press, September 2007. Providence, RI.

Maxim Peysakhov, Andrew Mroczkowski, Leonardo Urbano, Jacob Warren, Vincent A. Cicirello, William Regli, and Moshe Kam. Agent survivability through power awareness. In *Proceedings of the 2005 IEEE Second Symposium on Multi-Agent Security and Survivability*, pages 31–38, August 2005. Philadelphia, PA.

Vincent A. Cicirello, Andrew Mroczkowski, and William Regli. Designing decentralized software for a wireless network environment: Evaluating patterns of mobility for a mobile agent swarm. In *Proceedings of the 2005 IEEE Second Symposium on Multi-Agent Security and Survivability*, pages 49–57, August 2005. Philadelphia, PA.

Joseph B. Kopena, Vincent A. Cicirello, Maxim Peysakhov, Kris Malfettone, Andrew Mroczkowski, Gaurav Naik, Evan Sultanik, Moshe Kam, and William C. Regli. Network awareness and the philadelphia area urban wireless network testbed. In *AI Technologies for Homeland Security: Papers from the 2005 AAAI Spring Symposium*, pages 70–75. AAAI Press, March 2005. Stanford University, CA.

Donovan Artz, Vincent A. Cicirello, William Regli, and Moshe Kam. Engineering multi-agent systems. In *Proceedings of the 2004 IEEE First Symposium on Multi-Agent Security and Survivability*, pages 100–107, August 2004. Philadelphia, PA. **Acceptance rate: 29% (14/48)**.

Vincent A. Cicirello and Stephen F. Smith. Heuristic selection for stochastic search optimization: Modeling solution quality by extreme value theory. In *Principles and Practice of Constraint Programming – CP 2004: 10th International Conference, Proceedings*, volume LNCS 3258 of *Lecture Notes in Computer Science*, pages 197–211. Springer-Verlag, September/October 2004. Toronto, Canada. Acceptance rate: 29% (46/158).

Maxim D. Peysakhov, Vincent A. Cicirello, and William C. Regli. Ecology based decentralized agent management system. In *Formal Approaches to Agent-Based Systems: Third International Workshop, FAABS 2004, Revised Selected Papers*, volume LNCS 3228 of *Lecture Notes in Computer Science*, pages 1–11. Springer-Verlag, April 2004. Greenbelt, Maryland.

Dani Goldberg, Vincent Cicirello, M. Bernardine Dias, Reid Simmons, Stephen Smith, and Anthony Stentz. Market-based multi-robot planning in a distributed layered architecture. In *Multi-Robot Systems: From Swarms to Intelligent Automata: Proceedings of the 2003 International Workshop on Multi-Robot Systems*, volume 2, pages 27–38. Kluwer Academic Publishers, March 2003. Washington, DC. Acceptance rate: < 37% (26/70+).

Dani Goldberg, Vincent Cicirello, M. Bernardine Dias, Reid Simmons, Stephen Smith, and Anthony Stentz. Task allocation using a distributed market-based planning mechanism. In *Proceedings of the Second International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS-2003)*, pages 996–997. ACM Press, July 2003. Melbourne, Australia. Poster Paper. Acceptance rate for full papers: 24.7%, posters: 32.2%.

Vincent A. Cicirello and Stephen F. Smith. Amplification of search performance through randomization of heuristics. In *Principles and Practice of Constraint Programming – CP 2002:* 8th International Conference, Proceedings, volume LNCS 2470 of Lecture Notes in Computer Science, pages 124–138. Springer-Verlag, September 2002. Ithaca, NY. Acceptance rate: 30% (44/146).

Dani Goldberg, Vincent Cicirello, M. Bernardine Dias, Reid Simmons, Stephen Smith, Trey Smith, and Anthony Stentz. A distributed layered architecture for mobile robot coordination: Application to space exploration. In *The 3rd International NASA Workshop on Planning and Scheduling for Space*, October 2002. Houston, TX.

Vincent A. Cicirello and Stephen F. Smith. Distributed coordination of resources via wasp-like agents. In *Innovative Concepts for Agent-Based Systems: First International Workshop on Radical Agent Concepts, WRAC-2002*, volume LNAI 2564 of *Lecture Notes in Artificial Intelligence*, pages 71–80. Springer-Verlag, January 2002.

Vincent A. Cicirello and Stephen F. Smith. Randomizing dispatch scheduling policies. In *Using Uncertainty Within Computation: Papers from the 2001 AAAI Fall Symposium*, pages 30–37. AAAI Press, November 2001. North Falmouth, Massachusetts.

Vincent A. Cicirello and Stephen F. Smith. Wasp nests for self-configurable factories. In *Proceedings of the Fifth International Conference on Autonomous Agents*, pages 473–480. ACM Press, May/June 2001. Montreal, Quebec, Canada. **Acceptance rate: 27% (66/248)**.

Vincent A. Cicirello and William C. Regli. Machining feature-based comparison of mechanical parts. In *Proceedings of the International Conference on Shape Modeling and Applications*, pages 176–185. IEEE Computer Society Press, May 2001. Genova, Italy.

Vincent A. Cicirello and Stephen F. Smith. Insect societies and manufacturing. In *The IJCAI-01 Workshop on Artificial Intelligence and Manufacturing, Working Notes*, pages 33–38. AAAI SIGMAN, August 2001. Seattle, WA.

Vincent A. Cicirello and Stephen F. Smith. Improved routing wasps for distributed factory control. In *The IJCAI-01 Workshop on Artificial Intelligence and Manufacturing, Working Notes*, pages 26–32. AAAI SIGMAN, August 2001. Seattle, WA.

Vincent A. Cicirello and Stephen F. Smith. Ant colony control for autonomous decentralized shop floor routing. In *ISADS-2001: Proceedings of the Fifth International Symposium on Autonomous Decentralized Systems*, pages 383–390. IEEE Computer Society Press, March 2001. Dallas, TX.

Vincent A. Cicirello and Stephen F. Smith. Modeling GA performance for control parameter optimization. In *GECCO-2000: Proceedings of the Genetic and Evolutionary Computation Conference*, pages 235–242. Morgan Kaufmann Publishers, July 2000. Las Vegas, NV.

Vincent A. Cicirello and William C. Regli. Resolving non-uniqueness in design feature histories. In *Proceedings of the Fifth ACM/SIGGRAPH Symposium on Solid Modeling and Applications*, pages 76–84. ACM Press, June 1999. Ann Arbor, MI. **Acceptance rate:** < 30% (30/100+).

#### Extended Abstracts of Conference Demonstrations, Talks, and Posters

Gustave Anderson, Andrew Burnheimer, Vincent Cicirello, David Dorsey, Chris Dugan, Iris Howley, Moshe Kam, Joseph Kopena, Rob Lass, Kris Malfettone, Andy Mroczkowski, Gaurav Naik, Max Peysakhov, Brian Pyles, William Regli, Evan Sultanik, James Thiel, Kyle Usbeck, Dan Venutolo, and Marc Winners. The ai technologies of the philadelphia area urban wireless network testbed. In *The Proceedings of the Twentieth National Conference on Artificial Intelligence*, volume 4, pages 1674–1675. AAAI Press, July 2005. Pittsburgh, PA.

Gustave Anderson, Andrew Burnheimer, Vincent Cicirello, David Dorsey, Saturnino Garcia, Moshe Kam, Joseph Kopena, Kris Malfettone, Andy Mroczkowski, Gaurav Naik, Max Peysakhov, William Regli, Joshua Shaffer, Evan Sultanik, Kenneth Tsang, Leonardo Urbano, Kyle Usbeck, and Jacob Warren. Demonstration of the secure wireless agent testbed (swat). In *Proceedings of the Third International Joint Conference on Autonomous Agents and Multi-Agent Systems (AAMAS-2004)*, volume 3, pages 1214–1215. ACM Press, July 2004. New York City, NY.

Gustave Anderson, Andrew Burnheimer, Vincent Cicirello, David Dorsey, Saturnino Garcia, Moshe Kam, Joseph Kopena, Kris Malfettone, Andy Mroczkowski, Gaurav Naik, Max Peysakhov, William Regli, Joshua Shaffer, Evan Sultanik, Kenneth Tsang, Leonardo Urbano, Kyle Usbeck, and Jacob Warren. Intelligent systems demonstration: The secure wireless agent testbed (swat). In *Proceedings of the Nineteenth National Conference on Artificial Intelligence and the Sixteenth Innovative Applications of Artificial Intelligence Conference*, pages 1004–1005. AAAI Press, July 2004. San Jose, California.

Gustave Anderson, Andrew Burnheimer, Vincent Cicirello, David Dorsey, Saturnino Garcia, Moshe Kam, Joseph Kopena, Kris Malfettone, Andy Mroczkowski, Gaurav Naik, Max Peysakhov, William Regli, Joshua Shaffer, Evan Sultanik, Kenneth Tsang, Leonardo Urbano, Kyle Usbeck, and Jacob Warren. Demonstration of the secure wireless agent testbed (swat). In *The 14th International Conference on Automated Planning and Scheduling*, June 2004.

William C. Regli and Vincent A. Cicirello. Representations and algorithms for cad/cam digital libraries. In *SIAM Workshop on Mathematical Foundations for Features in Computer-Aided Design and Manufacturing*, page 34, October 1998. Extended Abstract. Troy, MI.

### **Technical Reports and Other Non-Refereed Research Papers**

Vincent A. Cicirello. Statistical models of multistart randomized heuristic search performance. Technical report, Richard Stockton College, Galloway, NJ, May 2008. http://www.cicirello.org/publications/cicirello-stockton-2008.pdf. Also presented at the 40th Symposium on the Interface: Computing Science and Statistics (conference without proceedings), in Durham, NC, sponsored by the National Institute of Statistical Sciences.

Demetrios Roubos, Shawn Casler, James Hedigan, Ryan Shaw, Suvineetha Herath, David Costantino, Vincent Cicirello, Robert Kachur, and Ajantha Herath. A study of wireless security privacy and forensics. *CCSC:SC Student Paper E-Journal*, 1, April 2008.

William C. Regli and Vincent A. Cicirello. Method for comparing solid models. U.S. Patent Application #10/430,046, May 2003.

Vincent A. Cicirello. Weighted tardiness scheduling with sequence-dependent setups: A benchmark library. Technical report, Intelligent Coordination and Logistics Laboratory, Robotics Institute, Carnegie Mellon University, Pittsburgh, PA, February 2003. http://www.cicirello.org/publications/wtsbenchmarks.pdf.

Vincent A. Cicirello. Boosting stochastic problem solvers through online self-analysis of performance. Ph.d. thesis proposal, Robotics Institute, Carnegie Mellon University, Pittsburgh, PA, July 2002. Document available upon request.

William C. Regli and Vincent A. Cicirello. Machining feature-based comparisons of mechanical parts. U.S. Provisional Patent Application #60/380,109, May 2002.

Vincent A. Cicirello and Stephen F. Smith. Wasp-like agents for distributed factory coordination. Technical Report CMU-RI-TR-01-39, Robotics Institute, Carnegie Mellon University, Pittsburgh, PA, December 2001.

Vincent A. Cicirello. A game-theoretic analysis of multi-agent systems for shop floor routing. Technical Report CMU-RI-TR-01-28, Robotics Institute, Carnegie Mellon University, Pittsburgh, PA, September 2001.

William C. Regli, Lisa Anthony, Vincent Cicirello, Jon John, Xiaoli Qin, Yuriy Shapirshteyn, and Vera Zaychik. The engineering design repositories project. In *National Science Foundation Design and Manufacturing Grantees Meeting*, January 2000. Vancouver, BC, Canada.

### **Datasets**

Vincent A. Cicirello. Weighted Tardiness Scheduling with Sequence-Dependent Setups: A Benchmark Library. Harvard Dataverse, June 2016. Originated: 02/2003. Last updated: 06/20/2016. http://dx.doi.org/10.7910/DVN/VHA0VQ.

### **Editorials (Non-Refereed)**

Vincent Cicirello and Aakash Taneja. Welcome—ccsc eastern 2015. *Journal of Computing Sciences in Colleges*, 31(3):1–2, January 2016.

Vincent Cicirello and Aakash Taneja. Welcome—ccsc eastern 2012. *Journal of Computing Sciences in Colleges*, 28(3):1–2, January 2013.

### **Publicly Available Software**

08/2016 Problem instance generator for the scheduling problem: Weighted Tardiness Scheduling with Sequence-Dependent Setups. Available at: https://github.com/cicirello/WeightedTardinessProblemGenerator. Originated: 02/2003. Current version: 08/15/2016.

02/2010 The Interactive Bin Packing Application, Version 2.0, February 2010.

11/2008 The Interactive Bin Packing Application, Version 1.0, November 2008.

### Research Grants, Collaborative Research Agreements, and Pending Proposals

#### **External Grants and Contracts**

- 08/2011-07/2015 Jill Gerhardt (PI), Vincent A. Cicirello (Co-PI), Brandy Rapatski (Co-PI), Monir Sharobeam (Co-PI), Aakash Taneja (Co-PI). "Scholarships for Success in Science, Technology, Engineering and Math" (\$597,992.00). National Science Foundation (NSF) Award #1059934. NSF Division of Undergraduate Education. NSF Scholarships in Science, Technology, Engineering, and Mathematics (NSF Solicitation 09-567).
- 03/2013-03/2015 Vincent A. Cicirello (PI). CRDA 2011-A-0272: An amendment to extend the term of agreement 11-CRDA-0272 by 24 months to March 25, 2015. Cooperative Research and Development Agreement with the Federal Aviation Administration William J. Hughes Technical Center.
- 03/2011-03/2013 Vincent A. Cicirello (PI). Agreement 11-CRDA-0272: "Index of Cognitive Activity and Characteristics of the Air Traffic Control Task". Cooperative Research and Development Agreement with the Federal Aviation Administration William J. Hughes Technical Center.
- 01/2009-01/2011 Vincent A. Cicirello (PI). Agreement 08-CRDA-0252: "Index of Cognitive Activity and Characteristics of the Air Traffic Control Task". Cooperative Research and Development Agreement with the Federal Aviation Administration William J. Hughes Technical Center.
- 08/2004-07/2005 William C. Regli (PI) and Vincent Cicirello. "Support for 2004 IEEE Symposium on Multi-Agent Security and Survivability". Defense Advanced Research Projects Agency (DARPA) Advanced Technology Office (ATO), P.O. NO 02B52-053. Amount: \$5,000.

### **Internal Stockton University Grants**

- 7/2016-6/2017 Vincent A. Cicirello. "A Mini-Beowulf Cluster of Raspberry Pi Single Board Computers." Career Development Committee. Amount: \$1038.
- 12/2015 Vincent A. Cicirello. "Travel Support to Attend the International Conference on Bioinspired Information and Communication Technologies." Provost Faculty Opportunities Fund. Amount: \$1200 (matched by an additional \$750 from the School of Business).
- 11/2013-05/2014 Vincent A. Cicirello. "ABET Assessment Training Workshop." Provost Program Assessment Fund. Amount: \$1000 (matched by an additional \$1210 from the School of Business).
- 01/2012-06/2012 Vincent A. Cicirello. "Automated Search for large-Scale Digital Libraries of Engineering Artifacts." Sabbatical.
- 07/2010-06/2011 Vincent A. Cicirello. "The Index of Cognitive Activity and Characteristics of the Air Traffic Control Task." Research and Professional Development Grant. Amount: \$5000.
- 07/2008-06/2009 Vincent A. Cicirello. "On the Utility of Fitness-Distance Correlation as a Statistical Tool for Modeling Problem Solving Difficulty of Computationally Hard Scheduling Problems." Summer Research Fund. Amount: \$4600.
- 01/2007-06/2007 Vincent A. Cicirello. "Support to Write a Proposal for the NSF Faculty Early CAREER Program." Grant Writing Support Fund. Amount: \$2500.
- 07/2006-06/2007 Vincent A. Cicirello. "A Benchmark Problem Set and Lower Bounds for the Weighted Tardiness Scheduling Problem with Sequence-Dependent Setups." Research and Professional Development Grant. Amount: \$4860.
- 01/2006-06/2006 Vincent A. Cicirello. "Support to Write a Proposal for the NSF Faculty Early CAREER Program." Division-Based Support Funds for Junior Faculty. Amount: \$5000.
- 06/2006 Vincent A. Cicirello. "Travel Support to Attend the 23rd International Conference on Machine Learning." Division-Based Support Funds for Junior Faculty. Amount: \$1194.
- 01/2006-06/2006 Vincent A. Cicirello. "Feasibility Study on the Integration of Mobile Robot Programming into CSIS 4463 Artificial Intelligence.". 2005 R&PD Mini-Grant Program. Amount: \$718.

### **Invited Talks, Lectures, and Other External Presentations**

05/23/2008	<b>Contributed Talk:</b> "Statistically Modeling the Performance of a Multistart Randomized Heuristic Algorithm" (In <i>The 40th Symposium on the Interface: Computing Science and Statistics</i> , Durham, NC. Sponsor: Interface Foundation of North America.)
04/18/2007	<b>Keynote Speaker:</b> "Heuristic Problem Solving and Multi-Robot Coordination" (Joint Meeting of the Southern Jersey Professional Societies: American Institute of Aeronautics and Astronautics (AIAA), Institute of Electrical and Electronics Engineers (IEEE), and the IEEE Computer Society)
05/17/2006	<b>Invited Speaker:</b> "Coordinating Multiple Heuristic Problem Solvers" (The William J Hughes FAA Technical Center Speaker Series)
12/16/2005	<b>Invited Speaker:</b> "Study of Crossover Operators for the GA Permutation Representation" (Drexel University, Autonomous Agents Seminar)
10/28/2004	<b>Invited Speaker:</b> "Enhancing Algorithm Portfolios through Search-Space Modeling: Applications to Coordination and Logistics" (Temple University, ECE Department Research Seminar)
04/16/2004	<b>Invited Speaker:</b> "Boosting Stochastic Problem Solvers Through Online Self-Analysis of Performance" (Sarnoff Corporation, Invited Talk)
02/2004	<b>Invited Talk:</b> "The Secure Wireless Agent Testbed," Vincent Cicirello, Moshe Kam, William Regli, Rafael Alonso, and Jeffrey Bloom. (In <i>DARPA Proposers Day Workshop: Defense Against Cyber Attacks on Mobile Ad Hoc Networks</i> , Sponsor: DARPA.)
04/21/2003	<b>Invited Speaker:</b> "Value-Biased Stochastic Sampling: Applications to Scheduling Problems" (Quantum Leap Innovations, Invited Talk)
07/08/2002	<b>Poster Presentation:</b> "Whistling: Wasp Behavior Inspired Stochastic Sampling," Vincent A. Cicirello and Stephen F. Smith. (In <i>The 2002 SIAM Annual Meeting and SIAM 50th Anniversary</i> , Philadelphia, PA. Sponsor: SIAM.)
12/2001	<b>Poster Presentation:</b> "Distributed Coordination of Resources Via Wasp-like Agents," Vincent A. Cicirello and Stephen F. Smith. (In <i>CUSTOM Mini Conference</i> , Pittsburgh, PA. Sponsor: Sandia National Lab; and the Center for Uncertain Systems: Tools for Optimization and Management (CUSTOM))

### **Internal Research Talks and Lectures**

11/22/2013	<b>Behavioral Neuroscience Lecture Series (Stockton University):</b> "Social Insect Behavior as Inspiration for Software Agent Coordination"
03/18/2013	<b>Mathematics Seminar (Stockton University):</b> "A Computer Scientist's Experience with the US Patent Process"
12/02/2005	Stockton University CSIS: "Agent-Oriented Software Engineering: An Introduction"
10/31/2005	<b>Mathematics Seminar (Stockton University):</b> "Swarm Intelligence: Distributed Problem Solving Inspired by collective Behavior of Insects and other Natural Multi-agent Systems"
07/06/2005	<b>Drexel University Computer Science Research Seminar:</b> "The Max K-Armed Bandit: A New Model of Exploration Applied to Search Heuristic Selection"
07/21/2003	Carnegie Mellon University Robotics, Ph.D. Thesis Defense: "Boosting Stochastic Problem Solvers Through Online Self-Analysis of Performance"
07/23/2002	Carnegie Mellon University Robotics, Ph.D. Thesis Proposal: "Boosting Stochastic Problem Solvers Through Online Self-Analysis of Performance"
03/27/2002	<b>Carnegie Mellon University Robotics:</b> "Amplification of Search Performance via Randomization of Heuristics"
02/22/2002	<b>Carnegie Mellon University Robotics:</b> "WHISTLING: Wasp beHavior Inspired STochastic sampLING"

04/12/2001	<b>Carnegie Mellon University Philosophy:</b> "Multi-Agent Systems for the Shop Floor: Game-Theoretic Analysis"
03/01/2001	<b>Carnegie Mellon University Robotics:</b> "Stochastic Search Part II: Genetic Algorithms and Evolutionary Search"
02/27/2001	<b>Carnegie Mellon University Robotics:</b> "Stochastic Search: Hill-Climbing, Simulated Annealing, Ant Colony Optimization, and Related Algorithms"
10/17/2000	Carnegie Mellon University Robotics: "Biological Inspiration: Ant Algorithms"
12/01/1999	<b>Carnegie Mellon University Robotics:</b> "A Genetic Algorithm for the Largest Common Subgraph Problem"
10/08/1999	<b>Carnegie Mellon University Robotics Student Seminar Series:</b> "Intelligent Retrieval of Solid Models"
05/27/1999	Drexel University, M.S. Thesis Defense: "Intelligent Retrieval of Solid Models"
05/06/1999	<b>Drexel University Research Day: The 11th Annual Sigma Xi Research Symposium:</b> "Intelligent Retrieval of CAD Models" (Poster Presentation)

Student Presentations: Supervision of Research Projects		
04/19/2013	"A Parallel Genetic Algorithm Framework for CUDA" presented by Demetrios Roubos at the Stockton University NAMS Spring Poster Session.	
02/21/2013	"Profiling the Distance Characteristics of Mutation Operators for Permutation-Based Genetic Algorithms" presented by Robert Cernera at the Stockton University NSF S-STEM Scholar Seminar.	
04/05/2011	"Geolocating and plotting historical data with SHIGS" presentation by Stan Schwertly, Brian O'Keefe, Aniello DiSpigna, and Andrew Hofstetter at the 2011 THATCamps Jersey Shore (The Humanities and Technology Camp), http://jerseyshore2011.thatcamp.org/.	

## **News Coverage**

07/14/2016	"Stockton Community Embraces New Pokémon GO App."  https://www.facebook.com/notes/stockton-university/stockton-community-embraces-new-pok%C3%A9mon-go-app/10153510722146899#	
10/29/2015	The Stockton Times (29 October 2015): "Stockton Hosts CCSC Eastern Conference." http://intraweb.stockton.edu/eyos/extaffairs/content/docs/stocktimes/StocktonTimesOctober292015.pdf	
11/25/2014	The Press of Atlantic City (25 November 2014): "Tech Firms Upgrade A.C." http://www.pressofatlanticcity.com/eedition/news/tech-firms-upgrade-a-c/article_1ecb702f-36e0-5518-a2e3-b2b2d5ded76e.html	
10/17/2011	The Galloway Patch (17 October 2011): "Stockton Receives Nearly \$600,000 in Grants From NSF." http://galloway.patch.com/articles/stockton-receives-nearly-600-000-in-grants-from-nsf	
01/04/2011	Shore News Today (4 January 2011): "Stockton students to design custom software for faculty." http://www.shorenewstoday.com/snt/news/index.php/galloway-twp-general-news/7169-stockton-students-to-design-custom-software-for-faculty.html	
12/12/2010	NJ.com and Gloucester County Times (12 December 2010): "New software engineering course to be offered at Stockton College." http://www.nj.com/atlantic/index.ssf/2010/12/new_software_engineering_course_to_be_offered_at_stockton_college.html	
03/22/2006	AI Magazine (Spring 2006): "AAAI Executive Council minutes". http://www.aaai.org/ojs/index.php/aimagazine/article/view/1873/1771. Coverage of AAAI 2005 Outstanding Paper Award.	
12/22/2005	AI Magazine (Winter 2005): "The Twentieth National Conference on Artificial Intelligence" (M. Veloso and S. Kambhampati). http://www.aaai.org/ojs/index.php/aimagazine/article/view/1854/1752. Coverage of AAAI 2005 Outstanding Paper Award.	

### **Course Development**

#### **Stockton University (Development of New Courses)**

CPLS 5420 Discrete Event Simulation and Agent Based Models.

This course is one of the core courses of the Master of Science in Computational Science, and is within the Modeling and Simulation track. Development of the course commenced in Summer 2009 and is continuing into the 2009-2010 academic year. The course development activities are funded by an external grant awarded to the School of Natural Sciences and Mathematics by FIPSE.

CSIS 4510 Topics in Computer Science: Human Performance Modeling.

In this course, students synthesize their computer science coursework experience to explore real-world problems of interest to local governmental agencies and industry. Working as a small group, in close collaboration with the instructor, students explore research questions related to human performance in aviation-related tasks (e.g., air traffic control). The course includes a study of topics related to statistical data mining with an application to human performance modeling.

CSIS 4510 Topics in Computer Science: Real World Applications of Intelligent Systems.

In this course, students synthesize their computer science coursework experience to explore real-world problems of interest to local governmental agencies and industry. Working as a small group, in close collaboration with the instructor, students undertake research on air traffic management.

GNM 2248 Artificial Intelligence in Society.

This course provides a broad overview and introduction to the field of artificial intelligence (AI) focusing on the impacts it has made on society during the past 50 years. Applications of AI are diverse ranging from manufacturing, medicine, finance, homeland security, and beyond. We will discuss articles by the pioneering scientists and philosophers who defined the field; explore applications and ethical issues; and examine current impacts highlighted in news of today. This course satisfies the *Historical consciousness* (*H*) requirement.

GNM 2358 Introduction to Game Theory. Developed in collaboration with Judith Vogel.

This course introduces the student to topics in Game theory. Game theory is a high level mathematical field that governs conflict resolution and decision making skills. This course is an interesting blend of deep mathematical theory and real-world practicality. Due to the rich applications associated with this field, this is a perfect course for Math, Science, Business, Economic, and Psychology majors. The students will be introduced to theoretical mathematical tools including matrices, vectors, and graph theory. Students will be taught applications associated with Biology, Politics, and Computer Science. This course is a *Quantitative Reasoning Intensive (Q1)* course.

### **Stockton University (Major Course Revision)**

CSIS 4485 *Software and Security Engineering.* 

Major revisions were made to our Software Engineering course. Specifically, the course was revised to be a "Real Projects for Real Clients Course". Each of the student teams are assigned a "real client" with a real software development project. The student teams take the project through all software development phases beginning with requirements engineering, up through design, specification, implementation, documentation, and delivery to their real client. In the first offering of the redesigned course (in Spring 2011), the students developed software for: (1) the Federal Aviation Administration's Human Factor's Lab; (2) a Stockton history professor; (3) a physical therapist; and (4) a local municipality's environmental commission. Particularly impressive was the team that developed a web-based system for geolocation of historical data. This team's work was presented at a Digital Humanities conference.

### **Drexel University (Development of New Courses)**

CS 485 Knowledge-Based Agents

This is an advanced level undergraduate course (also a graduate section of the course, CS 680) that introduces the basic concepts of agent-based computing and exposes students to a wide set of topics ranging from mathematical logic to game theory to emergent behavior to distributed systems. Developed in collaboration with William Regli and Max Peysakhov.

### **Courses Taught**

### **Stockton University**

CSIS 4510	Topics in Computer Science: Human Performance Modeling Spring 2010
CSIS 4510	Topics in Computer Science: Real World Applications of Intelligent Systems Fall 2009
CSIS 4485	Software and Security Engineering Fall 2016 (2 sections), Fall 2015, Fall 2014, Fall 2013, Fall 2012, Spring 2011
CSIS 4481	Cryptography and Data Security Fall 2016, Fall 2014, Fall 2012, Spring 2009, Spring 2007
CSIS 4466	Computer Graphics Fall 2015, Fall 2013, Fall 2011, Fall 2009, Fall 2007
CSIS 4463	Artificial Intelligence Spring 2017, Spring 2016, Spring 2015, Spring 2013, Fall 2010, Fall 2008, Fall 2006
CSIS 3103	Data Structures Fall 2011
CSIS 2226	Foundations of Computer Science (unofficially known as "Discrete Mathematics 2") Spring 2014, Spring 2011, Spring 2010, Spring 2009
CSIS 2102	Programming and Problem Solving II Spring 2008, Spring 2006
CSIS 2101	Programming and Problem Solving I Spring 2011, Fall 2010, Spring 2010 (2 sections), Fall 2009, Spring 2009, Fall 2008, Spring 2008 (2 sections), Fall 2007, Spring 2007 (2 sections), Fall 2006, Spring 2006 (2 sections), Fall 2005
CSIS 1180	Microcomputers and Applications Fall 2005
GNM 2358	Introduction to Game Theory Fall 2007
GNM 2248	Artificial Intelligence in Society  Online: Spring 2017 (2 sections), Spring 2016 (2 sections), Spring 2014, Summer 2013, Spring 2013, Summer 2012, Fall 2011, Summer 2011, Fall 2010, Summer 2010, Fall 2009, Fall 2008, Summer 2008, Summer 2007  Face-to-Face: Fall 2006
Drevel University	

### **Drexel University**

CS 485	Knowledge-Based Agents	Winter 2005
CS 481	Advanced Artificial Intelligence	Summer 2005, Summer 2004
CS 380	Introduction to Artificial Intelli	gence Spring 2005

## Supervision of Independent Study Projects, Internships, and Other Special Projects

Fall 2015	Topic: Machine Learning (CSIS 4800)	
	Primary Examiner for Credit by Exam: Data Structures (CSIS 3103)	
Spring 2015	Topic: Technology Analyst Intern (CSIS 4900)	
Fall 2014	Topic: Cryptography and Data Security (CPLS 5800)	

Spring 2014 Thesis Research (CPLS 5810) Spring 2014 Topic: Multi-Agent Systems (CSIS 4800) Spring 2014 Topic: Web Services Internship (CSIS 4900) Fall 2013 Thesis Research (CPLS 5810) Spring 2013 Thesis Research (CPLS 5810) Spring 2013 Topic: Evolutionary Computation (CSIS 4800, 1 credit) Spring 2013 Topic: IT Service Internship (CSIS 4900) Fall 2012 Thesis Research (CPLS 5810), 2 students Spring 2012 Thesis Research (CPLS 5810) Topic: AI Learning and Game Play (CSIS 4800) Spring 2010 Fall 2009 Topic: The National Airspace System (CSIS 4800, 1 credit) Spring 2009 Topic: Interactive Game Design (CSIS 4800) Topic: Wireless Networking Security (CSIS 4800) Topic: AI and Game Theory (CSIS 4800) Topic: The Semantic Web (CSIS 4800, 2 credits) Topic: Networking Research (One-on-One Connection Program) (CSIS 2800, 2 credits) Summer 2008 Topic: Nature Inspired Problem Solving (GNM 4800) Topic: Internship in Information Systems (CSIS 4900) Spring 2008 Topic: Statistical Programming (CSIS 3800) Fall 2007 Topic: Evolutionary Computation (CSIS 4800) Topic: AI Planning (CSIS 4800) Spring 2007 Topic: Software Design (CSIS 4800) Topic: AI in Gaming (CSIS 3800, 1 credit) Fall 2006 Topic: Knowledge-Based Systems (CSIS 4800)

### Advising (Thesis, Research, and Other Academic Advising)

#### **Thesis Committee Chair**

John Kluesner: M.S. in Computational Science, Stockton University, May 2014. Thesis Title: "Constructing Polynomial Remainder Sequences with Decreasing Coefficient Size." Currently a Ph.D. student at Simon Fraser University.

Demetrios Roubos: M.S. in Computational Science, Stockton University, May 2013. Thesis Title: "A Parallel Genetic Algorithm Framework for CUDA." Also presented at the NAMS Spring poster session, April 2013. Currently the Assistant Director of Information Security, Stockton University.

Byron Hoy: M.S. in Computational Science, Stockton University, December 2012. Thesis Title: "Swarm Intelligence Algorithms for Graph Pattern Matching Problems." Currently a Computer Scientist for CSSI Inc.

#### **Thesis Committee Member**

Donovan Artz: M.S. in Computer Science, Drexel University, December 2003. Thesis Title: "Integration of Security and Multi-agent Systems on Mobile Ad Hoc Networks."

### **Research Project Supervision**

- Robert Cernera (Stockton University CSIS major, Summer 2012 through Spring 2013): This project is supported via the NSF S-STEM Grant as a summer student research project. Topic: Distance Profiling Genetic Algorithm Mutation Operators for the Permutation Representation. Resulted in a co-authored refereed conference paper.
- Advised one CSIS major in Stockton's One-on-One Connection Program, where the top of the incoming freshmen are paired with faculty for 4-year long research experiences.
- Demetrios Roubos, Shawn Casler, James Hedigan, and Ryan Shaw (Stockton University CSIS majors, Winter break 2007-2008): Project on Wireless Security and Privacy (jointly advised with Ajantha Herath). Resulted in a student paper at a conference.
- Demetrios Roubos (Stockton University, Computer Science major, Fall 2006): Project was to design a webpage for automating the maintenance of a set of scheduling benchmark problems.
- Supervised research activities of between 15-20 students (undergraduates and graduate students) per academic quarter (from August 2003 until August 2005) as part of Drexel University's Secure Wireless Agent Testbed (SWAT) Project.

#### **Academic Advising**

Preceptor (Stockton University's term for advisor) for 30-40 computer science and information systems majors annually.

### **Professional Society Memberships**

1999-present AAAI Lifetime Member (Life Member since 2009)
1998-present ACM Senior Member (Senior Member since 2011)

2008-present ACM Special Interest Group on Artificial Intelligence (ACM SIGAI)

2006-present ACM Special Interest Group on Computer Science Education (ACM SIGCSE)

2014-present ACM Special Interest Group on Evolutionary Computation (ACM SIGEVO)

2007-present Consortium of Computing Sciences in Colleges (CCSC)

2014-present European Alliance for Innovation (EAI)

1995-present IEEE member

1995-present IEEE Computer Society member

2014-present IEEE Computational Intelligence Society member

1999-present SIAM member

#### **Professional Service Activities**

#### **Professional Society Boards and Committees**

2012–present Steering Committee of the Consortium for Computing Sciences in Colleges (CCSC) Eastern Re-

gion.

### **Academic Program Evaluator**

2013 External program evaluator for Salem Community College, Computer Science program.

### **Chairing Conferences and Conference Committees**

2016 Speakers Chair:

The 32nd Annual Eastern Conference of the Consortium for Computing Sciences in Colleges.

Frostburg State University, Frostburg, MD, October 28-29, 2016.

2015 Program Committee Vice Chair:

The 9th International Conference on Bio-inspired Information and Communications Technologies.

New York City, New York, December 3-5, 2015.

2015 Special Tracks Chair:

The 9th International Conference on Bio-inspired Information and Communications Technologies.

New York City, New York, December 3-5, 2015.

2015 Track Co-Chair (with Jun Suzuki):

Combinatorial Optimization track of the 9th International Conference on Bio-inspired Information

and Communications Technologies. New York City, New York, December 3–5, 2015.

2015 Conference Chair:

The 31st Annual Eastern Conference of the Consortium for Computing Sciences in Colleges.

Stockton University, Galloway, NJ, October 23-24, 2015.

2014 Poster Chair:

The 30th Annual Eastern Conference of the Consortium for Computing Sciences in Colleges.

York College of Pennsylvania, York, PA, November 14-15, 2014.

2012 Conference Chair:

The 28th Annual Eastern Conference of the Consortium for Computing Sciences in Colleges. Stockton University, Galloway, NJ, November 2-3, 2012. (Note: Conference cancelled due to Hurricane Sandy two days prior to event date after nearly two years preparations. All sessions

2005 Local Arrangements Chair: The 2005 IEEE Second Symposium on Multi-Agent Security and Survivability (MAS&S-2005). Philadelphia, PA, August 30-31, 2005. 2004 Local Arrangements Chair: The 2004 IEEE First Symposium on Multi-Agent Security and Survivability (MAS&S-2004). Philadelphia, PA, August 30-31, 2004. **Conference Program Committee Member** 2017 The 30th International Conference of the Florida Artificial Intelligence Research Society. Marco Island, Florida, May 22-24, 2017. 2017 10th EAI International Conference on Bio-inspired Information and Communications Technologies (BICT). Hoboken, NJ, March 15-17, 2017. 2016 2016 IEEE Symposium on Computational Intelligence in Scheduling and Network Design (IEEE CISND'16). Athens, Greece, December 6-9, 2016. 2016 2016 IEEE CISND Special Session: Metaheuristics and Hybrid Methods for Combinatorial Optimization Problems. Athens, Greece, December 6-9, 2016. 2016 The 29th International Conference of the Florida Artificial Intelligence Research Society. Key Largo, Florida, May 16-18, 2016. 2015 IEEE Symposium on Computational Intelligence in Scheduling (CISched). Cape Town, 2015 South Africa, December 7-10, 2015. 2015 The 28th International Conference of the Florida Artificial Intelligence Research Society. Hollywood, Florida, May 18-20, 2015. 2014 The 27th International Conference of the Florida Artificial Intelligence Research Society. Pensacola Beach, Florida, May 21-23, 2014. The 26th International Conference of the Florida Artificial Intelligence Research Society. St. Pete 2013 Beach, Florida, May 22-24, 2013. 2013 2013 IEEE Symposium on Computational Intelligence in Scheduling (CISched). Singapore, April 15-19, 2013. 2012 The 25th International Conference of the Florida Artificial Intelligence Research Society. Marco Island, Florida, May 23-25, 2012. 2011 The 25th National Conference on Artificial Intelligence (AAAI-2011). San Francisco, CA, August 7-11, 2011. The 27th Annual Eastern Conference of the Consortium for Computing Sciences in Colleges. 2011 Arlington, Virginia, October 14-15, 2011. 2011 The 24th International Conference of the Florida Artificial Intelligence Research Society. Palm Beach, Florida, May 18-20, 2011. 2011 2011 IEEE Symposium on Computational Intelligence in Scheduling (CISched). Paris, France, April 11-15, 2011. 2011 The 5th International Conference on Complex Distributed Systems (CODS 2011). Mannheim, Germany, December 5-7, 2011. The 4th International Conference on Complex Distributed Systems (CODS 2010). Chongqing, 2010 China, July 12-14, 2010. 2009 The 2009 IEEE Symposium on Computational Intelligence in Scheduling (CISched). Nashville, TN, March 30 - April 2, 2009.

rescheduled as a special track of the 29th Annual Eastern Conference of CCSC, in Ewing, NJ,

November 1-2, 2013.)

2009	The 3rd International Conference on Complex Distributed Systems (CODS 2009). Leipzig, Germany, March 23-25, 2009.
2008	The 2nd International Conference on Complex Distributed Systems (CODS 2008). Glasgow, UK, July 21-24, 2008.
2007	The 1st International Conference on Complex Distributed Systems (CODS 2007). Chengdu, China, July 22-24, 2007.
2007	The 9th Genetic and Evolutionary Computation Conference (GECCO-2007). London, England, July 7-11, 2007.
2007	The 2007 IEEE Symposium on Computational Intelligence in Scheduling (CISched). Honolulu, Hawaii, April 1-5, 2007.
2006	Workshop on Multi-Agents for Modeling Complex Systems (MA4CS'06): Held during the 2006 European Conference on Complex Systems. Oxford, UK, September 28-29, 2006.
2006	The 8th Genetic and Evolutionary Computation Conference (GECCO-2006). Seattle, WA, July 8-12, 2006.
2006	AAMAS-2006 Workshop on Engineering Self-Organizing Applications (ESOA '06). Held as part of the workshop program of the International Joint Conference on Autonomous Agents and Multi-Agent Systems. Hakodate, Japan, May 8-12, 2006.
2005	The 2005 IEEE Second Symposium on Multi-Agent Security and Survivability (MAS&S-2005). Philadelphia, PA, August 30-31, 2005.
2005	The Fourth International Joint Conference on Autonomous Agents and Multi-Agent Systems (AAMAS-2005). Utrecht, the Netherlands, July 25-29, 2005.
2005	The Twentieth National Conference on Artificial Intelligence (AAAI-2005). Pittsburgh, PA, July 9-13, 2005.
2005	The 7th Genetic and Evolutionary Computation Conference (GECCO-2005). Washington, D.C., June 25-29, 2005.
2005	AAMAS-2005 Workshop on Engineering Self-Organizing Applications (ESOA '05). Held as part of the workshop program of the International Joint Conference on Autonomous Agents and Multi-Agent Systems. Utrecht, the Netherlands, July 25-26, 2005.
2005	ICAPS-2005 Workshop on Constraint Programming for Planning and Scheduling (CPPS-05). Held as part of the workshop program of the International Conference on Automated Planning and Scheduling. Monterey, CA, June 6-7, 2005.
2004	The Third International Joint Conference on Autonomous Agents and Multi-Agent Systems (AAMAS-2004). New York City, NY, July 19-23, 2004.
2001	IJCAI-2001 Workshop on Artificial Intelligence and Manufacturing. Seattle, WA, August 2001.

### Journal Reviewer

Current Journal Reviewing (Within Past 5 Years):

ACM Transactions on Autonomous and Adaptive Systems

**Applied Soft Computing** 

Autonomous Agents and Multi-Agent Systems

Computer-Aided Design

IEEE Transactions on Knowledge and Data Engineering

IEEE Transactions on Parallel and Distributed Systems

Journal of Heuristics

Journal of Intelligent Manufacturing

Journal of Scheduling

SpringerPlus

Past Journal Reviewing (Longer than 5 Years Ago):

Adaptive Behavior

AI Communications

AIEDAM: AI for Engineering Design, Analysis and Manufacturing

European Journal of Operational Research

Journal of Computer and Information Science in Engineering

Journal of Machine Learning Research

Machine Learning Journal

Mathematics and Computers in Simulation

#### **Textbook Reviewer**

"Software Engineering: Principles and Practices", Robert Beasley, 2014.

http://www.seppbook.com/

"Python for Everyone", Cay Horstmann and Rance Necaise, John Wiley & Sons, Inc, 2013.

"Big Java" (3rd Ed.) / "Java Concepts" (5th Ed.), Cay Horstmann, John Wiley & Sons, Inc, 2008.

"Theory and Practice of Heuristic Search", S. Edelkamp, S. Schroedl, and S. Koenig, Elsevier / Morgan Kaufmann, 2007.

### **Conference Reviewer**

2015

2017	SIGCSE-2017: 48th ACM Technical Symposium on Computer Science Education, Seattle, WA.
2016	SIGCSE-2016: 47th ACM Technical Symposium on Computer Science Education, Memphis, TN.
2015	SIGCSE-2015: 46th ACM Technical Symposium on Computer Science Education, Kansas City, MO.
2014	IEEE SSCI 2014: 2014 IEEE Symposium Series on Computational Intelligence, Orlando, FL.
2014	SIGCSE-2014: 45th ACM Technical Symposium on Computer Science Education, Atlanta, GA.
2014	ITiCSE 2014: 19th Annual Conference on Innovation and Technology in Computer Science Education, Uppsala, Sweden.
2013	SIGCSE-2013: 44th ACM Technical Symposium on Computer Science Education, Denver, CO.
2013	ITiCSE 2013: 18th Annual Conference on Innovation and Technology in Computer Science Education, Canterbury, England.
2013	CCSCE-2013: 2013 Conference of the Consortium for Computing Sciences in Colleges—Eastern Region, Ewing, NJ.
2012	SIGCSE-2012: 43rd ACM Technical Symposium on Computer Science Education, Raleigh, NC.
2012	ITiCSE 2012: 17th Annual Conference on Innovation and Technology in Computer Science Education, Haifa, Israel.
2011	SIGCSE-2011: 42nd ACM Technical Symposium on Computer Science Education, Dallas, Texas.
2011	ITiCSE 2011: 16th Annual Conference on Innovation and Technology in Computer Science Education, Darmstadt, Germany.

2010	SIGCSE-2010: 41st ACM Technical Symposium on Computer Science Education, Milwaukee, WI.	
2010	ITiCSE 2010: 15th Annual Conference on Innovation and Technology in Computer Science Education, Ankara, Turkey.	
2010	CCSCE-2010: 2010 Conference of the Consortium for Computing Sciences in Colleges—Eastern Region	
2009	SIGCSE-2009: 40th ACM Technical Symposium on Computer Science Education, Chattanooga, TN.	
2009	CCSCNE-2009: 2009 Conference of the Consortium for Computing Sciences in Colleges—Northeastern Region	
2008	CCSCE-2008: 2008 Conference of the Consortium for Computing Sciences in Colleges—Eastern Region	
2008	ICIC-2008: The 2008 International Conference on Intelligent Computing, September 15-18, Shanghai, China	
2007	CCSCE-2007: 2007 Conference of the Consortium for Computing Sciences in Colleges—Eastern Region	
2007	IJCAI-2007: International Joint Conference on Artificial Intelligence	
2007	CCSCNE-2007: 2007 Conference of the Consortium for Computing Sciences in Colleges—Northeastern Region	
2005	IJCAI-2005: International Joint Conference on Artificial Intelligence	
1999	ASME DFM-99: ASME 4th Design for Manufacturing Conference	
Other Conference Related Service		
2013	Session Chair: The 29th Annual Eastern Conference of the Consortium for Computing Sciences in Colleges. The College of New Jersey, Ewing, NJ, November 1-2, 2013.	
2013	Poster Session Judge: The 29th Annual Eastern Conference of the Consortium for Computing Sciences in Colleges. The College of New Jersey, Ewing, NJ, November 1-2, 2013.	
Other External Professional Service Activities		
5/2014	Carnegie Mellon University, 2014 School of Computer Science, Alumni Award for Undergraduate Excellence ( <b>Award Committee Member</b> )	

# Robot Design Judge for the 2009 FIRST LEGO League: First State's Rowan University Qualifier.

Robot Design Judge for the 2013 FIRST LEGO League: First State's Rowan University Qualifier.

Robot Design Judge for the 2011 FIRST LEGO League: First State's Rowan University Qualifier.

Robot Design Judge for the 2010 FIRST LEGO League: First State's Rowan University Qualifier.

12/7/2013

12/3/2011

12/4/2010

12/5/2009

### **University Service**

### Stockton University—Chair of University-Wide Committees

2009-2018 Chair of the Faculty Senate Committee on Information Technology and Media Services (Chair)

2011 Chair of working group to revise the Learning Management Systems Use policy

2006-2007 Faculty Assembly Task Force on Distributed Education Sub-Committee on "Best Practices in

Distributed Education" (Sub-Committee Chair)

### Stockton University-Wide Committees

2015-present Information Technology Advisory Board
 2015-present Atlantic City Initiatives: Facilities Taskforce

2015-present Advising Council (Member)

2013-present SFT (union) liaison to the group developing an online system for faculty evaluations

2010-present Distance Education Advisory Board (Member)

2011-2013 FRC (Faculty Review Committee), School of Business, Alternate Representative (Active partici-

pation in Fall 2011 review cycle)

2011 Temporary Faculty Senate Webmaster in Fall 2011, during Mike Olan's sabbatical.

2010 Middle States Self Study Work Team on the Curriculum, Standards 11, 12, 13 (Member)

2009 H1N1 Information Technology Contingency Planning Committee (Member)

2009 The 2009 Technology Strategic Planning Task Force (Member)

2008-2009 Technology and Media Standing Committee (School of Business Representative)

2008-2009 Academic Policies Subcommittee on Student Orientation for Distance Education (Member)

2009 Distance Education Committee exploring design of faculty professional development program for

distance education (Member)

2/2008-6/2008 "Pilot" user of the Stockton Go Portal

2007-2008 Quantitative Reasoning Across the Disciplines (QUAD) Central Task Force (Professional Studies

Division Representative)

2006-2007 Faculty Assembly Task Force on Distributed Education (Member)

### Stockton University—School-Wide Committees

2014 Search Committee member: Professional Services Specialist position

11/20/2013 Scholarship Recognition Dinner: School of Business Representative

2009-2010 School of Business Task Force on Accreditation (Member)
 2008-2009 School of Business Task Force on Curriculum (Member)

### Stockton University—CSIS Program Service

2012-2016 CSIS Program Coordinator

Various Chair of CSIS Faculty Search Committees:

2016-2017 tenure-track information systems position

2016 visiting assistant professor

2014-2015 tenure-track information systems position

2015 half-time position

2013-2014 visiting assistant professor and half-time positions

2012-2013 tenure-track and half-time positions

2010-2011 tenure-track search (Co-Chaired with Lyn Mathis) 2009-2010 tenure-track search (Co-Chaired with Mike Olan)

2008-2009 tenure-track and visiting positions (Co-Chaired with Mike Olan)

Various Freshmen Orientation Advising [6/2016, 6/2015, 6/2014, 7/2013, 7/2008, 7/2007]

2014-2015 Faculty mentor for a Visiting Assistant Professor.

2011-2015 Faculty mentor and review advisor for Duo (Helen) Wei

Various Transfer Orientation Advising [7/2014, 1/2014, 7/2013, 1/2013, 8/2009, 7/2008-8/2008, 7/2007-

8/2007, 7/2006-8/2006]

Various CSIS representative at Stockton Open Houses [11/10/2013, 11/2012, 12/2008, 12/2007, 3/2007,

10/02/2005]

2013 Extra precepting to advise students of faculty member on medical leave (Spring semester)

2012 Extra precepting to advise students of faculty member on medical leave (Fall semester)

2011 Extra precepting to advise students of faculty member on sabbatical (Fall semester)

2011 Chair of subcommittee on assessing programming

2010 Faculty mentor for a first-year Assistant Professor

Various Member of CSIS Faculty Search Committees:

2007-2008 visiting assistant professor

2005-2006 tenure-track search

2008 CSIS Committee to Develop Program Evaluation Standards (with Mike Olan and Aakash Taneja)

Various CSIS representative at Stockton "Instant Decision Days" [11/21/2008, 02/22/2008]

### Stockton University—Other Committees

2014-2016 Committee to develop M.S. in Data Science and Strategic Analytics.

2013-2014 Committee to develop Computational Thinking Minor.

2008-2012 CSIS representative on the Computational Science (CPLS) Curriculum Committee

2009 Committee to develop Behavioral Neuroscience Minor

2008-2009 CPLS Faculty Search Committee

2008 CSIS representative on the Computational Science (CPLS) Ad-Hoc Graduate Committee

2008 CPLS Modeling and Simulation Graduate Track Committee

02/09/2006 Participated in GNM approval meeting 09/27/2005 Participated in GNM approval meeting

**Drexel University** 

Fall 2004 Evaluation Committee for College of Engineering senior design projects

### **Awards and Honors**

### **Professional Society Awards and Honors**

2011 Designated an ACM Senior Member

### **Conference Best Paper Awards**

2005 AAAI'05 Outstanding Paper Award

#### **Conference Best Paper Award Nominations**

2006 Nominated for the GECCO'06 Best Paper Award in the Genetic Algorithms Track

#### **Other Professional Honors**

Who's Who in America 2011

#### **Local University Related Honors**

2016 Stockton University Annual Employee Recognition Day—Ten Years Service
2011 Stockton University Annual Employee Recognition Day—Five Years Service
2007 Faculty Banner carrier at the May 2007 Stockton University Commencement

### Fellowships and Scholarships

1999-2003 Graduate Fellowship in Robotics: 100% tuition and fees plus living stipend (Carnegie Mellon U.)

1999 NSF Graduate Research Fellowship Honorable Mention (NSF)

1998 NSF Research Experiences for Undergraduates (NSF)

1994-1999 The Anthony J. Drexel Scholarship: 5 years, full tuition (Drexel U.)

1994-1998 The City of Philadelphia Scholarship: \$1000/year

### **Student Travel Awards**

1997

2002 The 2002 SIAM Annual Meeting: \$500 & gratis registration

2001 AAAI Fall Symposium: Using Uncertainty Within Computation: \$500

2001 International Conference on Autonomous Agents (Agents-01): \$1000

2000 Genetic and Evolutionary Computation Conference (GECCO-2000): \$600

1999 Fifth ACM/SIGGRAPH Symposium on Solid Modeling and Applications: \$500

### Academic Awards and Honors (Undergraduate)

1999 Senior First Honors for Mathematics: Highest GPA of Mathematics Graduates (Drexel U.): \$200

1999 Senior Second Honors for Computer Science: Second Highest GPA of Computer Science Gradu-

ates (Drexel U.): \$150

1999 Graduate with Distinction of the University Honors Program (Drexel U.)

The Dean's List (Drexel U.): Every academic quarter 1994-1999

The Frank H. M. Williams Prize in Mathematics (Drexel U.): \$5

1998 The Frank H. M. Williams Prize in Mathematics (Drexel U.): \$579

1998 The Dean's Special Scholastic Achievement Award (Drexel U.): \$200

1997 The Golden Key Honor Society – KPMG Peat Marwick Scholarship Award: \$100

The James B. Maginnis Award for Computer Science (Drexel U.): \$200

1996 The Dean's Special Scholastic Achievement Award (Drexel U.): \$200

1994 Admitted to Drexel University Honors Program

### **Honor Society Inductions**

1997 The Golden Key International Honour Society 1997 Upsilon Pi Epsilon International Honor Society for the Computing and Information Disciplines 1997 Pi Mu Epsilon National Mathematics Honor Society 1996 Kappa Theta Epsilon National Co-Op Honor Society 1995

### Non-Academic Awards/Honors

1997 Presented with a "300 Game Ring" by the American Bowling Congress (ABC) for bowling a

perfect 300 game in a sanctioned league on April 30, 1997

Phi Eta Sigma National Honor Society (freshmen honor society)

1997 Name added to the "Hometown Heros" display at the National Bowling Museum and Hall of Fame

in recognition of a perfect 300 game bowled on April 30, 1997

1997 Banner bearing my name hangs over the pair of lanes on which my 300 game was bowled at St.

Monica Lanes, Philadelphia, PA

Miscellanea Erdös number: 4 (Paul Erdös ightarrow Endre Szemerédi ightarrow Ali Shokoufandeh ightarrow William C. Regli ightarrow

Vincent A. Cicirello)

Academic Ancestry: Vincent A. Cicirello (Ph.D. 2003 Carnegie Mellon University) → Stephen F. Smith (Ph.D. 1980 University of Pittsburgh) → Kenneth Alan De Jong (Ph.D. 1975 University of Michigan) → John Henry Holland (Ph.D. 1959 University of Michigan) → Arthur Walter Burks (Ph.D. 1941 University of Michigan) → Cooper Harold Langford (Ph.D. 1924 Harvard University)

September 14, 2016