CHRISTOPHER D. GEIGER, PH.D.

CONTACT INFORMATION

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EDUCATION

Dec 2001	*Ph.D., Industrial Engineering*	School of Industrial Engineering Purdue University, West Lafayette, IN
Jun 2001	*Master Certificate, Applied Management Principles*	Krannert School of Management Purdue University, West Lafayette, IN
Dec 1995	*M.S., Industrial Engineering*	School of Industrial Engineering Purdue University, West Lafayette, IN
Dec 1992	*B.S., Industrial Engineering*	Department of Industrial and Systems Engineering North Carolina A&T State University, Greensboro, NC

PROFESSIONAL EXPERIENCE

Academic

May 2007-Present	*Co-Director & UCF Site Director, NSF I/UCRC for e-Design*	University of Central Florida Orlando, FL
Jul 2006-May 2007	*UCF Co-Site Director, NSF I/UCRC for e-Design*	University of Central Florida Orlando, FL
Jan 2006-Present	*Research Faculty Lead – Probabilistic Design, Siemens Center of Excellence: Advanced Turbines and Energy Systems*	University of Central Florida Orlando, FL
Jan 2004-Present	*Assistant Professor*	Department of Industrial Engineering and Management Systems University of Central Florida Orlando, FL
Jan 2002-Dec 2003	*Assistant Professor*	Department of Industrial and Systems Engineering North Carolina A&T State University Greensboro, NC

Industrial

May 1997-Aug 1998; May 1996-Dec 1996	*Industrial Engineering Co-op*	Intel Corporation, Chandler, AZ
Aug 1994-May 1995; Aug 1995-May 1996	*Computer Simulation Consultant*	Delphi Corporation - Delphi Delco Electronics Systems Division, Kokomo, IN (Formerly Delco Electronics, Inc.)
May 1994-Aug 1994; May 1995-Aug 1995	*Industrial Engineering Summer Intern*	Delphi Corporation - Delphi Delco Electronics Systems Division, Kokomo, IN (Formerly Delco Electronics, Inc.)
May 1993-Aug 1993	*Manufacturing Engineering Summer Intern*	Ford Motor Company, Connersville, IN

RESEARCH INTERESTS

Production planning; Operations sequencing and scheduling theory; Emergency evacuation and disaster planning; Multiobjective optimization (Multicriteria decision-making); Evolutionary algorithms; Simulation modeling and analysis

RESEARCH GRANTS

Submitted and Funded

Summary of Awarded Research Funding (including credit)

Federal / Governmental (NSF, NASA, DOD, *etc.*)	Industrial	University	Total
$259,730 (of $415,262)	$52,386 (of $52,386)	$50,633 (of $72,255)	$362,749 (of $539,903)

1. "Supplement: University of Central Florida Research Site of the Industry/University Cooperative Research Center (I/UCRC) in *e*-Design;" Sponsor: National Science Foundation; Investigator(s): **C.D. Geiger (PI)**; Project Term: Aug 2007-Jul 2008; Awarded Amount: $14,261 (of $28,521), or 50% (of 100%).
2. "Supplement: University of Central Florida Research Site of the Industry/University Cooperative Research Center (I/UCRC) in *e*-Design;" Sponsor: National Science Foundation; Investigator(s): **C.D. Geiger (PI)**; Project Term: Aug 2007-Jul 2008; Awarded Amount: $14,273 (of $28,545), or 50% (of 100%).
3. "STTR Phase I: Training Effectiveness Evaluation with Neurophysiological Metrics: Fidelity Assessment of VE Training Systems (TEE-FAST);" Sponsor: Design Interactive, Inc. / Office of Naval Research; Investigator(s): **C.D. Geiger (PI)**; Project Term: May 2007-Jan 2008; Awarded Amount: $21,000 (of $21,000), or 100% (of 100%).
4. "Subcontract for Repair Parts Workload Leveling;" Sponsor: Siemens Power Corporation; Investigator(s): **C.D. Geiger (PI)**; Project Term: Aug 2006-Dec 2006; Awarded Amount: $11,025 (of $11,025), or 100% (of 100%).
5. "Automated Transit System: An Automated Planning and Scheduling Transportation System;" Sponsor: University of South Florida Center for Urban Transportation Research; Investigator(s): **C.D. Geiger (PI)**; Project Term: Aug 2006-Mar 2007; Awarded Amount: $15,465 (of $15,465), or 100% (of 100%).
6. "RET Supplement: University of Central Florida Research Site of the Industry/University Cooperative Research Center (I/UCRC) in *e*-Design;" Sponsor: National Science Foundation; Investigator(s): **C.D. Geiger (PI),** M. Alexander-Snow (Co-PI), S. Furterer (Co-PI); Project Term: Aug 2004-Jul 2008; Awarded Amount: $8,000 (of $20,000), or 40% (of 100%).
7. "University of Central Florida Research Site of the Industry/University Cooperative Research Center (I/UCRC) in E-Design;" Sponsor: National Science Foundation; Investigator(s): **C.D. Geiger (PI and Site Director since May 2007),** Y. Wang (Co-PI), L.C. Rabelo (Co-PI), J.A. Sepúlveda (Co-PI), N. Yousef (Co-PI); Project Term: Aug 2004-Jul 2009; Awarded Amount: $25,000 (of $50,000), or 50% (of 100%).
8. "University of Central Florida Research Site of the Industry/University Cooperative Research Center (I/UCRC) in E-Design;" Sponsor: National Science Foundation; Investigator(s): L.L. Crumpton-Young (PI), **C.D. Geiger (Co-PI and Co-Site Director Jul 2006-May 2007),** Y. Wang (Co-PI), L.C. Rabelo (Co-PI), J.A. Sepúlveda (Co-PI), N. Yousef (Co-PI); Project Term: Aug 2004-Jul 2009; Awarded Amount: $10,000 (of $50,000), or 20% (of 100%).
9. "Decision Support Tool for Risk Management Decisions for the Launch Services Program;" Sponsor: National Aeronautics and Space Administration / Analex Corporation; Investigator(s): **C.D. Geiger (PI)**; Project Term: 2004-2005; Awarded Amount: $128,196 (of $128,196), or 100% (of 100%).
10. "A Framework for Automated Optimization and Input Parameter Specifications for IMPRINT Simulation Software;" Sponsor: Army Research Laboratory; Investigator(s): **C.D. Geiger (Co-PI)**, E.J.

Lodree (Co-PI); Project Term: 2003-2004; Awarded Amount: $50,000 (of $100,000), or 50% (of 100%).
11. "Autonomous Learning of Effective Operational Policies for Resource Planning and Scheduling;" Sponsor: National Aeronautics and Space Administration – Johnson Space Center; Investigator(s): **C.D. Geiger (PI)**; Project Term: 2003-2004; Awarded Amount: $10,000 (of $10,000), or 100% (of 100%).
12. "Distributed Intelligent Agents for Resource Planning and Scheduling;" Sponsor: Intel Corporation; Investigator(s): **C.D. Geiger (PI)**; Project Term: 2002-2003; Awarded Amount: $20,361 (of $20,361), or 100% (of 100%).
13. "Interdisciplinary Center for Remanufacturing Supply Chain Systems;" Sponsor: North Carolina A&T State University FUTURES Council; Investigator(s): P.M. Stanfield (PI), **C.D. Geiger (Co-PI)**, E.J. Lodree (Co-PI), S.D. Morgan (Co-PI); Project Term: 2002-2003; Awarded Amount: $3,209 (of $14,830), or 21.6% (of 100%).
14. "Restructuring of the Piedmont Triad Center for Advanced Materials and Manufacturing;" Sponsor: North Carolina A&T State University Division of Research; Investigator(s): S.J. Udoka (PI), **C.D. Geiger (Co-PI)**; Project Term: 2002; Awarded Amount: $6,667 (of approximately $16,668), or 40% (of 100%).
15. "Rapid Learning and Modeling of Scheduling Policies;" Sponsor: Purdue University Research Foundation; Investigator(s): **C.D. Geiger (PI)**, R. Uzsoy (Co-PI); Project Term: 1999-2001; Awarded Amount: $25,292 (of $25,292), or 100% (of 100%).

PUBLISHED WORKS

Journal Citation Reports Summary

Journal Citation Reports (JCR) is a comprehensive and unique resource that determines which journals are the largest, have the highest impact, or are used the most frequently by researchers in a field. It uses citation data drawn from over 7,500 scholarly and technical journals from more than 3,300 publishers in over 60 countries. It is the only source of citation data on journals, and includes virtually all areas of science, technology, and social sciences.

Impact Factor: Number of cited articles versus the number of articles published; the higher the better; In the areas of Industrial Engineering / Manufacturing Engineering / Operations Research / Management Science, a journal Impact Factor > 1.000 is considered "Excellent".

Journal Title (in alphabetical order)	2007 Impact Factor	# of Published/ Accepted Papers
Computers and Industrial Engineering	0.554	2
IEEE Transactions: Components, Packaging and Manufacturing, Part C	N/A	1
International Journal of Production Research	0.560	1
Journal of Manufacturing Systems	N/A	1
Journal of Heuristics	0.644	2
Journal of Scheduling	1.000	1

Refereed Journal Papers

1. E.J. Lodree, **C.D. Geiger** and X. Jiang, "Taxonomy for Integrating Scheduling Theory and Human Factors: Review and Research Opportunities" *International Journal of Industrial Ergonomics* (accepted for publication).
2. H. Eskandari and **C.D. Geiger**, 2008, "Evolutionary Multiobjective Optimization in Noisy Problem Environments," *Journal of Heuristics*, Digital Object Identifier: 10.1007/s10732-008-9077-z. Appeared online Jun 3, 2008 (URL: http://dx.doi.org/10.1007/s10732-008-9077-z).
3. D.L. McWilliams, P.M. Stanfield and **C.D. Geiger**, 2008, "Minimizing the Completion Time of the

Transfer Operations in a Central Parcel Consolidation Terminal with Unequal-Batch-Size Inbound Trailers," *Computers and Industrial Engineering*, **54**(4), 709-720, Digital Object Identifier: 10.1016/j.cie.2007.10.006. Appeared online Oct 17, 2007 (URL: http://dx.doi.org/doi:10.1016/j.cie.2007.10.006).

4. H. Eskandari and **C.D. Geiger**, 2008, "A Fast Pareto Genetic Algorithm Approach for Solving Expensive Multiobjective Optimization Problems," *Journal of Heuristics*, **14**(3), 203-241, Digital Object Identifier: 10.1007/s10732-007-9037-z. Appeared online Sep 28, 2007 (URL: http://dx.doi.org/10.1007/s10732-007-9037-z).
5. **C.D. Geiger** and R. Uzsoy, 2008, "Learning Effective Dispatching Rules for Batch Processor Scheduling," *International Journal of Production Research*, **46**(6), 1431-1454, Digital Object Identifier: 10.1080/00207540600993360. Appeared online Nov 27, 2006 (URL: http://dx.doi.org/10.1080/00207540600993360).
6. **C.D. Geiger**, R. Uzsoy and H. Aytuğ, 2006, "Rapid Modeling and Discovery of Priority Dispatching Rules: An Autonomous Learning Approach," *Journal of Scheduling*, **9**(1), 7-34, Digital Object Identifier: 10.1007/s10951-006-5591-8. Appeared online Jan 10, 2006 (URL: http://dx.doi.org/10.1007/s10951-006-5591-8)
7. D.L. McWilliams, P.M. Stanfield and **C.D. Geiger**, 2005, "The Parcel Hub Scheduling Problem: A Simulation-Based Solution Approach," *Computers and Industrial Engineering*, **49**(3), 393-412, Digital Object Identifier: 10.1016/j.cie.2005.07.002. Appeared online Sep 21, 2005 (URL: http://dx.doi.org/10.1016/j.cie.2005.07.002).
8. **C.D. Geiger**, R. Hase, C.G. Takoudis and R. Uzsoy, 1997, "Alternative Facility Layouts for Semiconductor Wafer Fabrication Facilities," *IEEE Transactions: Components, Packaging and Manufacturing Technology, Part C*, **20**(2), 152-163, Digital Object Identifier: 10.1109/3476.622885 (URL: http://dx.doi.org/10.1109/3476.622885).
9. **C.D. Geiger**, K.G. Kempf and R. Uzsoy, 1997, "A Tabu Search Approach to Scheduling an Automated Wet Etch Station," *Journal of Manufacturing Systems*, **16**, 102-116.

Book Chapters

1. H. Eskandari, **C.D. Geiger** and G.B. Lamont, 2007, "FastPGA: A Dynamic Population Sizing Approach for Solving Expensive Multiobjective Optimization Problems," *Lecture Notes in Computer Science: Evolutionary Multi-Criterion Optimization*, Springer Berlin / Heidelberg, **4403/2007**, 141-155, Digital Object Identifier: 10.1007/978-3-540-70928-2_14 (URL: http://dx.doi.org/10.1007/978-3-540-70928-2_14).

Refereed Conference Papers

Invited

1. A.T. Sharawi, **C.D. Geiger** and R.J. Butler, "Emergency Response Planning for Anticipated Hurricane Events", *Proceedings of the 2007 Institute of Industrial Engineers Annual Research Conference (CD-ROM)*, Nashville, TN, May 19-23, 2007.
2. A.A Saleh, **C.D. Geiger** and E.J. Lodree, Jr., "Evacuation Route Planning of Heterogeneous, Incompatible Flows in Emergency Situations", *Proceedings of the 2007 Institute of Industrial Engineers Annual Research Conference (CD-ROM)*, Nashville, TN, May 19-23, 2007.
3. H. Eskandari, **C.D. Geiger** and G.B. Lamont, "FastPGA: A Dynamic Population Sizing Approach for Solving Expensive Multiobjective Optimization Problems," *Proceedings of the 4th International Conference on Evolutionary Multi-Criterion Optimization*, Matsushima/Sendai, Japan, Mar 5-8, 2007.
4. A.L. Williams, **C.D. Geiger** and S.G. Adams, 2005, "An Investigation of Conflict Management for Virtual *e*-Design Teams," *Proceedings of the 2005 International Conference on e-Design*, Atlanta, GA, May 14-15, 2005.

Contributed

1. S.K. Durrani, **C.D. Geiger**, D. Jones and K. Hale, "An Approach for Assessing Training Effectiveness in Virtual Reality Environments", *Proceedings of the 2008 Institute of Industrial Engineers Annual Research Conference (CD-ROM)*, Vancouver, British Columbia, Canada, May 14-19, 2008.
2. H. Eskandari, **C.D. Geiger** and R. Bird, "Handling Uncertainty in Evolutionary Multiobjective

Optimization: SPGA", *Proceedings of the 2007 IEEE Congress on Evolutionary Computation (CD-ROM)*, Singapore, Sep 25-28, 2007, pp. 4130-4137.

3. **C.D. Geiger**, E.J. Lodree, Jr. and O.E. Martinez, "A Multi-Objective Modeling Approach for Joint Maintenance and Spare Parts Inventory Policy Optimization", *Proceedings of the 2007 Institute of Industrial Engineers Annual Research Conference (CD-ROM)*, Nashville, TN, May 19-23, 2007.
4. A.M. McLendon, **C.D. Geiger** and E.J. Lodree, Jr., "Scheduling Parallel Machines with Machine Eligibility Restrictions Minimizing Total Weighted Tardiness", *Proceedings of the 2007 Institute of Industrial Engineers Annual Research Conference (CD-ROM)*, Nashville, TN, May 19-23, 2007.
5. H. Eskandari and **C.D. Geiger**, "Solving Expensive Multiobjective Optimization Problems: A Fast Pareto Genetic Algorithm Approach," *Proceedings of the 2006 Genetic and Evolutionary Computation Conference*, Seattle, WA, Jul 8-12, 2006.
6. M. Jeffrey, R.J. Butler and **C.D. Geiger**, 2006, "An Empirical Evaluation of Inventory Planning Frequencies based on Cost and Production Stability," *Proceedings of the 2006 Institute of Industrial Engineers Annual Research Conference (CD-ROM)*, Orlando, FL, May 20-24, 2006.
7. S. Schultz and **C.D. Geiger**, 2005, "Transitioning Students from Simulation Mechanics to Simulation As A Process Improvement Tool: A Multi-Media Case Study Approach," *Proceedings of the 2005 Winter Simulation Conference (CD-ROM)*, M.E. Kuhl, N.M. Steiger, F.B. Armstrong and J.A. Joines, eds., Orlando, FL, Dec 4-7, 2005.
8. T.M. Shaalan and **C.D. Geiger**, 2005, "Determining Capital Investments Within a Balanced Inventory Pooling System for Spare Parts," *Proceedings of the 11th International Conference on Industry, Engineering, and Management Systems*, Cocoa Beach, FL, Mar 14-16, 2005.
9. K. Meza, C. Lamia, L.L. Crumpton-Young and **C.D. Geiger**, 2004, "Use of SWOT Analysis and Process Evaluation Tools," *Proceedings of the 10th International Conference on Industry, Engineering, and Management Systems*, Cocoa Beach, FL, Mar 15-17, 2004.
10. **C.D. Geiger**, R. Uzsoy and H. Aytuğ, 2003, "Autonomous Learning of Effective Dispatch Policies for Flowshop Scheduling Problems," *Proceedings of the 2003 Institute of Industrial Engineers Annual Research Conference (CD-ROM)*, Portland, OR, May 17-21, 2003.
11. M.L. Squire, **C.D. Geiger** and E.J. Lodree, 2003, "An Automatized Mapping of Effective Priority Dispatching Rules to Scheduling Problems," *Proceedings of the 2003 Institute of Industrial Engineers Annual Research Conference (CD-ROM)*, Portland, OR, May 17-21, 2003.
12. P.Y. Stewart, E.J. Lodree and **C.D. Geiger**, 2003, "A Methodology for Analyzing the Success of Strategic Alliances for Small Businesses," *Proceedings of the 2003 Institute of Industrial Engineers Annual Research Conference (CD-ROM)*, Portland, OR, May 17-21, 2003.

Non-Refereed Conference Papers

1. E.J. Lodree and **C.D. Geiger**, 2003, "Solving the Two-Product Newsvendor Problem: A Simulation Optimization Approach," *Proceedings of the 2003 Society for Modeling and Simulation Advanced Simulation Technologies Conference*, Orlando, FL, Mar 30-Apr 3, 2003.
2. S. Morgan, P. Stanfield, E. Lodree, **C. Geiger**, 2002, "Remanufacturing Supply Chains," *Proceedings of the 2002 National Conference on Environmental Science and Technology*, 351-359, Greensboro, NC, Sep 8-10, 2002.

Non-Refereed Conference Short Abstracts, Extended Abstracts and Other Technical Papers, Reports and Manuscripts

1. M.L. Squire, **C.D. Geiger**, and P.M. Stanfield, 2005, "Extracting Patterns from Groups of Dispatching Rules," *Proceedings of the 2005 Institute of Industrial Engineers Annual Research Conference (CD-ROM)*, Atlanta, GA, May 15-18, 2005.
2. S.T. Lytle, **C.D. Geiger** and L.L. Crumpton-Young, 2004, "An Integrated Approach to Analyzing Systems and Their Subsystems," *Proceedings of the 2004 Institute of Industrial Engineers Annual Research Conference (CD-ROM)*, Houston, TX, May 16-19, 2004.
3. A.M. Ferreras, L.L. Crumpton-Young, A.K. Elshennawy and **C.D. Geiger**, 2004, "The Use of Decision Trees as a Reliable Management Tool," *Proceedings of the 2004 Institute of Industrial Engineers Annual Research Conference (CD-ROM)*, Houston, TX, May 16-19, 2004.

WORKS IN PROGRESS

Journal Citation Reports Summary

Journal Citation Reports (JCR) is a comprehensive and unique resource that determines which journals are the largest, have the highest impact, or are used the most frequently by researchers in a field. It uses citation data drawn from over 7,500 scholarly and technical journals from more than 3,300 publishers in over 60 countries. It is the only source of citation data on journals, and includes virtually all areas of science, technology, and social sciences.

Impact Factor: Number of cited articles versus the number of articles published; the higher the better; In the areas of Industrial Engineering / Manufacturing Engineering / Operations Research / Management Science, a journal Impact Factor > 1.000 is considered "Excellent".

Journal Title (in alphabetical order)	2007 Impact Factor	# of Submitted/ Revised Papers
Safety Science	0.427	1
Production Planning and Control	0.561	1
Decision Support Systems	1.119	1
European Journal of Operational Research	1.096	1
Operations Management Research	N/A	1

Under Review

1. **C.D. Geiger**, A.A Saleh and S. Kittirattanapaiboon, "Evacuation Route Planning of Heterogeneous, Incompatible Flows in Unexpected Emergency Situations", *Safety Science* (submitted Sep 2008).
2. **C.D. Geiger**, E.J. Lodree and O.E. Martinez, "Coordinating Maintenance and Spare Parts Inventory Policies for Negotiating Long-Term Service Agreements - A Multiobjective Optimization Approach," *Operations Management Research Journal* (submitted Sep 2008).
3. A.T. Sharawi, **C.D. Geiger** and R.J. Butler, "Emergency Response Planning for Anticipated Hurricane Events", *Decision Support Systems* (submitted Aug 2008).
4. E.J. Lodree and **C.D. Geiger**, "Optimal scheduling of a rate-modifying activity under simple linear deterioration," *European Journal of Operational Research* (submitted Jan 2008).

Under Revision

1. M.M. Jeffrey, R.J. Butler and **C.D. Geiger**, "Generating Effective Production and Inventory Control Policies Using an Exponentially Weighted Moving Average Control Chart," *Production Planning and Control*.

In Preparation *(Working Titles)*

1. **C.D. Geiger**, E.J. Lodree, V. Lasrado and A.M. McLendon, "Scheduling Parallel Machines with Machine Eligibility Restrictions Minimizing Total Weighted Tardiness", (planned submission date: Dec 2008).
2. **C.D. Geiger** and R. Uzsoy, "Bottleneck Scheduling for Multi-Stage Manufacturing Environments using Genetic Programming" (planned submission date: Dec 2008).
3. **C.D. Geiger**, L.L. Crumpton-Young, K. Meza, and S. Furterer, "A Multicriteria Analysis Framework for Conceptual Product Design" (planned submission date: Feb 2009).

CONFERENCE PRESENTATIONS

Upcoming Presentations

Contributed

1. O.E. Martinez and **C.D. Geiger**, "Multi-echelon Maintenance and Service Parts Inventory Policy Optimization: A Multiobjective Approach", Institute for Operations Research and the Management Sciences 2008 Annual Meeting, Washington, DC, Oct 12-15, 2008.

Past Presentations

Invited

1. A.T. Sharawi, **C.D. Geiger** and R.J. Butler, "Emergency Response Planning for Anticipated Hurricane Events", Institute for Operations Research and the Management Sciences 2007 Annual Meeting, Seattle, WA, Nov 4-7, 2007.
2. **C.D. Geiger**, A.A Saleh and E.J. Lodree, Jr., "Evacuation Route Planning of Heterogeneous, Incompatible Flows in Emergency Situations", Institute for Operations Research and the Management Sciences 2007 Annual Meeting, Seattle, WA, Nov 4-7, 2007.
3. A.T. Sharawi, **C.D. Geiger** and R.J. Butler, "Emergency Response Planning for Anticipated Hurricane Events", 2007 Institute of Industrial Engineers Annual Research Conference, Nashville, TN, May 19-23, 2007.
4. A.A Saleh, **C.D. Geiger** and E.J. Lodree, Jr., "Evacuation Route Planning of Heterogeneous, Incompatible Flows in Emergency Situations", 2007 Institute of Industrial Engineers Annual Research Conference, Nashville, TN, May 19-23, 2007.
5. H. Eskandari, **C.D. Geiger** and G.B. Lamont, "FastPGA: A Dynamic Population Sizing Approach for Solving Expensive Multiobjective Optimization Problems," 4th International Conference on Evolutionary Multi-Criterion Optimization, Matsushima/Sendai, Japan, Mar 5-8, 2007.
6. K.I. Meza, L.L. Crumpton-Young, **C.D. Geiger**, R.L. Hoekstra, S.E. Schubert, D.T. Babb, "The Development of a Conceptual Design Environment to Support User Centered Design Considerations," 2007 International Conference on Design Principles and Practices, Imperial College London University, London, England, Jan 4-7, 2007.
7. **C.D. Geiger**, R. Uzsoy and H. Aytuğ, "Coordinated Collaboration of Multi-Agents in Multi-Stage Production Scheduling Environments," 16th Annual Conference of the Production and Operations Management Society, Chicago, IL, Apr 29-May 2, 2005.
8. A.L. Williams, **C.D. Geiger** and S.G. Adams, "An Investigation of Conflict Management for Virtual *e*-Design Teams," 2005 International Conference on *e*-Design, Atlanta, GA, May 14, 2005.
9. **C.D. Geiger**, R. Uzsoy and H. Aytuğ, "Autonomous Learning of Effective Dispatch Policies for Flowshop Scheduling Problems," Institute of Industrial Engineers Annual Research Conference, Portland, OR, May 17-21, 2003.

Contributed

1. O.E. Martinez, **C.D. Geiger** and E.J. Lodree, "A Multiobjective Modeling Approach for Coordinated Maintenance and Service Parts Inventory Policy Optimization", 2008 Production and Operations Management Society Annual Meeting, La Jolla, CA, May 9-12, 2008.
2. S.K. Durrani, **C.D. Geiger**, D. Jones and K. Hale, "An Approach for Assessing Training Effectiveness in Virtual Reality Environments", 2008 Institute of Industrial Engineers Annual Research Conference, Vancouver, British Columbia, Canada, May 14-19, 2008.
3. C. Casanas and **C.D. Geiger**, "A Method for the Collocation of Tier-1 Suppliers in Build-to-Order Supply Chains", 2008 Institute of Industrial Engineers Annual Research Conference, Vancouver, British Columbia, Canada, May 14-19, 2008.
4. **C.D. Geiger**, E.J. Lodree and O.E. Martinez, "A Multiobjective Modeling Approach for Joint Maintenance and Spare Parts Inventory Policy Optimization", 2007 Institute of Industrial Engineers Annual Research Conference, Nashville, TN, May 19-23, 2007.
5. A.M. McLendon and **C.D. Geiger**, "Scheduling Parallel Machines with Machine Eligibility Restrictions

Minimizing Total Weighted Tardiness", 2007 Institute of Industrial Engineers Annual Research Conference, Nashville, TN, May 19-23, 2007.

6. K. Meza, S. Schubert, D. Babb, H. Eskandari, L. Crumpton-Young, **C. Geiger**, R. Hoekstra, "Towards the Development of a Conceptual Modeling Multi-Criteria Analysis Environment to Support User Centered Design", 2007 Institute of Industrial Engineers Annual Research Conference, Nashville, TN, May 19-23, 2007.
7. T.M. Shaalan and **C.D. Geiger**, "A Novel Approach for Build-to-Order Supply Chain Design," Institute for Operations Research and the Management Sciences 2006 Annual Meeting, Pittsburgh, PA, Nov 5-8, 2006.
8. H. Eskandari and **C.D. Geiger**, "Multiobjective Simulation Optimization: SPGA," Institute for Operations Research and the Management Sciences 2006 Annual Meeting, Pittsburgh, PA, Nov 5-8, 2006.
9. H. Eskandari and **C.D. Geiger**, "Solving Expensive Multiobjective Optimization Problems: A Fast Pareto Genetic Algorithm Approach," 2006 Genetic and Evolutionary Computation Conference, Seattle, WA, Jul 8-12, 2006.
10. S. Furterer, A. Battikhi, **C.D. Geiger**. R.L. Hoekstra, L.L. Crumpton-Young and M. Mollaghasemi, "Applying Object Oriented and Use Case Analysis Techniques to Conceptual Product Design," 2006 Institute of Industrial Engineers Annual Research Conference, Orlando, FL, May 20-24, 2006.
11. H. Eskandari, S.E. Schubert, **C.D. Geiger** and M. Mollaghasemi, "A New Framework for Multi-criteria Analysis in User-Centered Product Design," 2006 Institute of Industrial Engineers Annual Research Conference, Orlando, FL, May 20-24, 2006.
12. H. Eskandari and **C.D. Geiger**, "A New Genetic Algorithm for Multiobjective Optimization Problems Using Adaptive Population Sizing," 2006 Institute of Industrial Engineers Annual Research Conference, Orlando, FL, May 20-24, 2006.
13. M. Jeffrey, R.J. Butler and **C.D. Geiger**, 2006, "An Empirical Evaluation of Inventory Planning Frequencies based on Cost and Production Stability," 2006 Institute of Industrial Engineers Annual Research Conference, Orlando, FL, May 20-24, 2006.
14. S. Schultz and **C.D. Geiger**, "Transitioning Students from Simulation Mechanics to Simulation As A Process Improvement Tool: A Multi-Media Case Study Approach," Winter Simulation 2005 Conference, Orlando, FL, Dec 4-7, 2005.
15. H. Eskandari, **C.D. Geiger** and M. Mollaghasemi, "A Fast Multiobjective Evolutionary Algorithm Approach for Stochastic Problem Environments," Institute for Operations Research and the Management Sciences 2005 Annual Meeting, San Francisco, CA, Nov 13-16, 2005.
16. M.L. Squire, **C.D. Geiger**, and P.M. Stanfield, "Extracting Patterns from Groups of Dispatching Rules," 2005 Institute of Industrial Engineers Annual Research Conference, Atlanta, GA, May 14-18, 2005.
17. T.M. Shaalan and **C.D. Geiger**, "Determining Capital Investments within a Balanced Inventory Pooling System for Spare Parts," 11th International Conference on Industry, Engineering, and Management Systems, Cocoa Beach, FL Mar 14-16, 2005.
18. M.L. Squire, **C.D. Geiger** and P.M. Stanfield, "Extracting Domain-Specific Knowledge from Production Scheduling Rules," National Consortium for Graduate Degrees for Minorities in Engineering and Science, Inc. (GEM) 6th Annual Future Faculty & Professionals Symposium, Las Vegas, NV, Jun 9-11, 2004.
19. J.S. Glenn and **C.D. Geiger**, "A Methodology for Developing a Multi-Criteria Decision Support System," National Consortium for Graduate Degrees for Minorities in Engineering and Science, Inc. (GEM) 6th Annual Future Faculty & Professionals Symposium, Las Vegas, NV, Jun 9-11, 2004.
20. S.T. Lytle, **C.D. Geiger** and L.L. Crumpton-Young, "An Integrated Approach to Analyzing Systems and Their Subsystems," Institute of Industrial Engineers Annual Research Conference, Houston, TX, May 15-19, 2004.
21. **C.D. Geiger**, "Using Decision Trees as a Reliable Decision Support Tool," Institute of Industrial Engineers Annual Research Conference, Houston, TX, May 15-19, 2004.
22. M.L. Squire and **C.D. Geiger**, "Generating Rule Classifications for Production Scheduling Problems," 2nd World Production and Operations Management Conference, Cancun, Mexico, Apr 30-May 3, 2004.
23. K. Meza, C. Lamia, L.L. Crumpton-Young and **C.D. Geiger**, "Use of SWOT Analysis and Process Evaluation Tools," 10th International Conference on Industry, Engineering, and Management

Systems, Cocoa Beach, FL Mar 15-17, 2004.
24. E.J. Lodree and **C.D. Geiger**, "Scheduling Jobs on a Single Machine with Varying Performance," Institute for Operations Research and the Management Sciences Annual Meeting, Atlanta, GA, Oct 19-22, 2003.
25. M.L. Squire and **C.D. Geiger**, "Developing A Diagram Of Dispatching Policies To Problems," Institute for Operations Research and the Management Sciences Annual Meeting, Atlanta, GA, Oct 19-22, 2003.
26. **C.D. Geiger** and E.J. Lodree, "Using Simulation for Order Policy Optimization," National Consortium for Graduate Degrees for Minorities in Engineering and Science, Inc. (GEM) 5th Annual Faculty Bridge Seminar, Houston, TX, May 27-31, 2003.
27. M.L. Squire, **C.D. Geiger** and E.J. Lodree, "An Automatized Mapping of Effective Priority Dispatching Rules to Scheduling Problems," Institute of Industrial Engineers Annual Research Conference, Portland, OR, May 17-21, 2003.
28. P.Y. Stewart, E.J. Lodree and **C.D. Geiger**, "A Methodology for Analyzing the Success of Strategic Alliances for Small Businesses," Institute of Industrial Engineers Annual Research Conference, Portland, OR, May 17-21, 2003.
29. E.J. Lodree and **C.D. Geiger**, "Solving the Two-Product Newsvendor Problem: A Simulation Optimization Approach," Society for Modeling and Simulation Advanced Simulation Technologies Conference, Orlando, FL, Mar 30-Apr 3, 2003.
30. S.D. Morgan, P.M. Stanfield, E.J. Lodree and **C.D. Geiger**, "Remanufacturing Supply Chains: A Critical Assessment," International Conference on Waste Management, Greensboro, NC, Sep 8-10, 2002.
31. **C.D. Geiger**, R. Uzsoy and H. Aytuğ, "Rapid Modeling and Learning of Priority Dispatching Rules," Institute for Operations Research and the Management Sciences Annual Meeting, Miami Beach, FL, Nov 4-7, 2001.
32. **C.D. Geiger**, K.G. Kempf and R. Uzsoy, "A Tabu Search Approach to Scheduling an Automated Wet Etch Station," Institute for Operations Research and the Management Sciences Annual Meeting, New Orleans, LA, Nov 5-8, 1995.

MULTIDISCIPLINARY RESEARCH EFFORTS AND ACTIVITIES

- *Co-Director and Site Director* for the NSF I/UCRC for *e*-Design (NSF Award #IIP-0433461). The NSF I/UCRC for *e*-Design is a joint research coalition comprised of five universities working closely with various businesses and government organizations. This coalition was established to create a new design paradigm and electronic design tools that will assist in generating high quality products and systems at a reduced cost while reducing the time associated with designing complex engineered products and systems.
    - Responsible for performing leadership, management, and administrative responsibilities important to the research and educational mission of the Center at the UCF research site, which includes four faculty members of Industrial Engineering and one faculty member of Engineering Technology.
    - The other four university members of the Center include University of Pittsburgh, University of Massachusetts Amherst, Virginia Tech (Lead) and Carnegie Mellon.
    - Fourteen disciplines are involved with the Center. They include Industrial Engineering, Engineering Management, Mechanical Engineering, Electrical Engineering, Computer Engineering, Computer Science, Engineering Technology, Mathematics, Aerospace Engineering, Ocean Engineering, Chemical Engineering, Biomedical Engineering, Civil & Environmental and Engineering Education.
    - NSF Center for *e*-Design Website: http://e-design.iems.ucf.edu

- *Research Faculty Lead* for Probabilistic Design Theory and Practice for the Siemens Center of Excellence: Advanced Turbines and Energy Systems at the University of Central Florida
    - I currently lead the research efforts in the area of Probabilistic Design Theory applied to turbine research, design and development.
    - Several disciplines are involved with the Siemens Center of Excellence. They include

Mechanical Engineering, Materials Engineering, Nanoscience and Engineering, Physics, Civil & Environmental, Economics and Engineering Education.

- *Co-PI* of an awarded grant entitled "Discipline and Curriculum Integration Using the ALIVE System." Sponsor: National Science Foundation (Course, Curriculum, and Laboratory Improvement – Educational Materials Development ("National Dissemination")); Investigator(s): P.M. Stanfield (PI), **C.D. Geiger (Co-PI)**, S.M. Morgan (Co-PI), B. Ram (Co-PI), S.J. Udoka (Co-PI); Project Term: Mar 2004-Feb 2009. (NSF Award #DUE-341492)
    - This project addresses the preeminent need for practicing engineers and technical businesspersons to possess systems engineering, information technology, and business skills that traditional collegiate education does not adequately develop. Based on a growing understanding of how people learn, this educational model is likely to attract more students to engineering and technical management careers, to promote an enhanced educational experience and result in a greater level of career success and satisfaction. The outcome of the project will hopefully become a focused, continual curriculum tool for general use in engineering and technical business education.
    - The disciplines that are involved with this project include Industrial Engineering, Systems Engineering, Manufacturing Engineering, Business & Economics and Engineering Education.

TEACHING INTERESTS

Production and Inventory Control Theory; Operations Sequencing and Scheduling Theory; Heuristic Optimization; Discrete-Event Simulation Modeling and Analysis

TEACHING EXPERIENCE

University of Central Florida

Term	Undergraduate	Graduate
Spring 2009		Discrete Systems Simulation (3 Cr Hrs) Production and Inventory Control (3 Cr Hrs)
Fall 2008	Introduction to Industrial Engineering and Management Systems (2 Cr Hrs)	
Summer 2008		Discrete Systems Simulation (3 Cr Hrs)
Spring 2008		Discrete Systems Simulation (3 Cr Hrs) Production and Inventory Control (3 Cr Hrs)
Fall 2007	Introduction to Industrial Engineering and Management Systems (2 Cr Hrs)	Scheduling and Sequencing (3 Cr Hrs)
Spring 2007		Discrete Systems Simulation (3 Cr Hrs) Production and Inventory Control (3 Cr Hrs)
Fall 2006		Scheduling and Sequencing (3 Cr Hrs)
Spring 2006		Discrete Systems Simulation (3 Cr Hrs) Production and Inventory Control (3 Cr Hrs)
Fall 2005		Discrete Systems Simulation (3 Cr Hrs)
Spring 2005		Production and Inventory Control (3 Cr Hrs)
Summer 2004		Discrete Systems Simulation (3 Cr Hrs)
Spring 2004		Production and Inventory Control (3 Cr Hrs)

North Carolina A&T State University

Term	Undergraduate	Graduate
Fall 2003	Discrete Event Simulation (3 Cr Hrs)	Industrial Simulation (3 Cr Hrs) Systems Engineering Models (3 Cr Hrs) Project Management (3 Cr Hrs)
Spring 2003	Production Control (3 Cr Hrs)	Production Planning and Scheduling (3 Cr Hrs) Engineering Cost Control (3 Cr Hrs)
Fall 2002	Discrete Event Simulation (3 Cr Hrs)	Industrial Simulation (3 Cr Hrs) Systems Engineering Models (3 Cr Hrs)
Spring 2002	Production Control (3 Cr Hrs)	Production Planning and Scheduling (3 Cr Hrs) Engineering Cost Control (3 Cr Hrs)

Purdue University

Term	Position	Course Topic
Summer 2001	Graduate Instructor	Course: Web Page Design and Development Using HTML
Spring 1996; Spring 1999	Graduate Teaching Assistant	Industrial Engineering Senior Design (Capstone Design Project Course)
Spring 1997	Graduate Instructor	Integrated Production Systems
Fall 1993-Spring 1994	Graduate Teaching Assistant	Engineering Economic Analysis
Spring 1993	Graduate Teaching Assistant	Probability and Statistics in Engineering

EDUCATION-BASED GRANTS

Submitted and Funded

Summary of Awarded Research Funding (including credit)

Federal / Governmental (NSF, NASA, DOD, *etc.*)	Industrial	University	Total
$37,477 (of $374,767)	-	$19,525 (of $19,525)	$57,002 (of $394,292)

1. "Discipline and Curriculum Integration Using the ALIVE System;" Sponsor: National Science Foundation Course, Curriculum, and Laboratory Improvement – Educational Materials Development ("National Dissemination"); Investigator(s): P.M. Stanfield (PI), **C.D. Geiger (Co-PI)**, S.D. Morgan (Co-PI), B. Ram (Co-PI), S.J. Udoka (Co-PI); Project Term: Mar 1, 2004-Feb 29, 2009; Awarded Amount: $37,477 (of $374,767) , or 10% (of 100%). (NSF Award #DUE-341492)
2. "Virtual Factory Teaching System Impact on Student Learning and Outcomes;" Sponsor: National Science Foundation (Course, Curriculum, and Laboratory Improvement – Educational Materials Development ("National Dissemination") / University of Southern California; Investigator(s): **C.D. Geiger (PI)**, E.H. Park (Co-PI); Project Term: 2002-2003; Awarded Amount: $19,525 (of $19,525), or 100% (of 100%).

Submitted and Under Review

Summary of Requested Research Funding (including credit)

Federal / Governmental (NSF, NASA, DOD, *etc.*)	Industrial	University	Total
$89,959 (of $149,932)	-	-	$89,959 (of $149,932)

1. "An Interdisciplinary Course Educational Model for Systems Engineering Education for Undergraduate Students;" Sponsor: National Science Foundation; Investigator(s): **C.D. Geiger (PI)**, N. Yousef (Co-PI), A. Sleiti (Co-PI), N. Catbas (Co-PI); Submitted: May 2008; Requested Amount: $89,959 (of $149,932), or 60% (of 100%); Project Duration: 2 years.

DOCTORAL, MASTER AND BACHELOR HONORS THESIS ADVISORY COMMITTEES (CHAIR OR CO-CHAIR)

Ph.D. Dissertations Completed

Amani A. Saleh; Graduation: May 2008
- Dissertation Topic/Title: "Modeling Lane-Based Traffic Flow in Emergency Situations in the Presence Of Multiple Heterogeneous Flows"
- Employment/Location upon Graduation: Simulation Associate – TransSolutions, Inc., Dallas, TX

Abeer T. Sharawi; Graduation: Dec 2007
- Dissertation Topic/Title: "Optimization Models for Emergency Response Planning For Anticipated Hurricane Events"
- Employment/Location upon Graduation: Quality Engineer – Tara Technologies, Daytona Beach, FL

Tarek M. Shaalan; Graduation: Dec 2006
- Dissertation Topic/Title: "Optimizing the Global Performance of Build-To-Order Supply Chains"
- Employment/Location upon Graduation: Supply Chain Management Consultant – Agility Logistics, Inc. (formerly PWC Logistics), Dubai, United Arab Emirates

Hamidreza Eskandari; Graduation: Aug 2006

Dissertation Topic/Title: "Multiobjective Simulation Optimization Using Enhanced Evolutionary Algorithms"
Employment/Location upon Graduation: Assistant Professor, Department of Industrial Engineering, Tarbiat Modares University, Tehran, Iran

Michelle L. Squire; Graduation: May 2006 (NC A&T SU – Co-Chair)
Dissertation Topic/Title: "Classification of Problem Domain Attributes for Scheduling Rule Development"
Employment/Location upon Graduation: NAVAIR, Maryland

Ph.D. Dissertations in Progress *(Working Title/Topic)*

Oscar E. Martinez; Expected Graduation: Dec 2008
Dissertation Topic/Title: Service Parts Planning and Control: A System-of-Systems Coordination Perspective

Suebpong Kittirattanapaiboon; Expected Graduation: May 2009
Dissertation Topic/Title: Emergency Evacuation Planning

Cesar Casanas; Expected Graduation: May 2010
Dissertation Topic/Title: Supplier Co-location in Build-to-Order Supply Chains

Narasimha Nagaiah; Expected Graduation: May 2010
Dissertation Topic/Title: Probabilistic Design

Anthony L. Williams; Expected Graduation: May 2010
Dissertation Topic/Title: Conflict Management on Virtual Teams

DOCTORAL, MASTER AND BACHELOR HONORS THESIS ADVISORY COMMITTEES (MEMBER)

Ph.D. Dissertations Completed

Adriana Rodriguez; Expected Graduation: Aug 2008
Dissertation Topic/Title: "A Framework to Align Organizational Strategy, Customer Satisfaction, and Performance Indicators Using an Integration of Six Sigma and Balanced Scorecard"
Employment/Location upon Graduation: Not Available

Karla Alvarado; Expected Graduation: May 2008
Dissertation Topic/Title: "Value Mapping Framework Involving Stakeholders to Improve Supply Chain Performance When Implementing IT Projects"
Employment/Location upon Graduation: Visiting Assistant Professor of Engineering Technology, University of Central Florida, Orlando, FL

Sami Spahi; Expected Graduation: May 2008
Dissertation Topic/Title: "Optimizing the Level of Customization for Products in Mass Customization Systems"
Employment/Location upon Graduation: Visiting Assistant Professor of Industrial Engineering and Management Systems, University of Central Florida, Orlando, FL

Ali Ahmad; Expected Graduation: Aug 2007
Dissertation Topic/Title: "Design for Auditory Displays: Identifying Temporal and Spatial Information Conveyance Principles"
Employment/Location upon Graduation: Research Scientist, Design Interactive, Inc., Oviedo, FL

Serge Sala-Diakanda; Graduation: May 2007
Dissertation Topic/Title: "A Framework for the Assessment and Analysis of Multi-Hazards Induced Risk Resulting from Space Vehicles Operation"
Employment/Location upon Graduation: Visiting Assistant Professor of Industrial Engineering and Management Systems, University of Central Florida, Orlando, FL

Erica Egri; Graduation: May 2007
Dissertation Topic/Title: "Using Surrogate Measures to Predict Patient Satisfaction in the Emergency Department"
Employment/Location upon Graduation: Operations Research Analyst, Walt Disney World, Orlando, FL

Nabin Sapkota; Graduation: Dec 2006
Dissertation Topic/Title: "Simulation of Random Set Covering Problems with Known Optimal Solutions and Explicitly Induced Correlation among Coefficients"
Employment/Location upon Graduation: Adjunct Professor of Industrial Engineering and Management Systems, University of Central Florida, Orlando, FL

Seyhun Hepdogan; Graduation: May 2006
Dissertation Topic/Title: "Parameter Setting and Other Efficiencies for Meta-RaPS"
Employment/Location upon Graduation: Seattle, WA

Mariah McMurran Jeffrey; Graduation: Aug 2005
Dissertation Topic/Title: "Optimizing Agility in the Semiconductor Supply Network"
Employment/Location upon Graduation: IBM Business Consulting Services, Portland, OR

Xuefeng Yu; Graduation: Jun 2005 (NC A&T SU)
Dissertation Topic/Title: "Bio-Inspired Multiagent Scheduling for Dynamic Job Shop with Flexible Job Routes"
Employment/Location upon Graduation: Enova Technology, Charlotte, NC

Douglas L. McWilliams; Graduation: Jun 2004 (NC A&T SU)
Dissertation Topic/Title: "Improving Productivity in a Hub Terminal through Enhanced Planning and Scheduling"
Employment/Location upon Graduation: Assistant Professor, Department of Industrial Technology, Purdue University, West Lafayette, IN

Ph.D. Dissertations in Progress *(Working Title/Topic)*

Lindon Fairweather; Expected Graduation: May 2009
Dissertation Topic/Title: Queueing Models for Long-Distance Road Races

M.S. Theses Completed

Taylor Edwards; Graduation: Dec 2006
Thesis Topic/Title: "Timing Drive Optimization on a High Speed Valvetrain"
Employment/Location upon Graduation: USAF, Las Vegas, NV

Abha Trivedi; Graduation: Aug 2005
Thesis Topic/Title: "Designing a Document Delivery System for UCF's Interlibrary Loan Department"
Employment/Location upon Graduation: Not Available

Fakir Mohideen; Graduation: Dec 2004
Thesis Topic/Title: "Ascertaining the Growth of a Corporation: A System Dynamics Approach"
Employment/Location upon Graduation: Lake Mary, FL

Amit Wasabikar; Graduation: Dec 2004
Thesis Topic/Title: "Developing an Object-Oriented Approach for Operations Simulation in SPEEDES"
Employment/Location upon Graduation: Siemens Westinghouse, Orlando, FL

Fred Gruber; Graduation: Dec 2004
Thesis Topic/Title: "Evolutionary Optimization of Support Vector Machines"
Employment/Location upon Graduation: Doctoral Student, Department of Electrical and Computer Engineering, Northeastern University, Boston, MA

M.S. Research Projects Completed

James K. Davis, II; Graduation: Dec 2003 (NC A&T SU)
Project Topic/Title: "Using a Logistic Regression Model to Increase Retention at North Carolina A&T State University"
Employment/Location upon Graduation: Nestlé USA, Jonesboro, AR

Glenn L. Stiles, Jr.; Graduation: Dec 2003 (NC A&T SU)
Project Topic/Title: Not Available

Employment/Location upon Graduation: Not Available

Ileka Scruggs; Graduation: Dec 2002 (NC A&T SU)
Project Topic/Title: Not Available
Employment/Location upon Graduation: Johnson and Johnson, Patterson, NJ

Levar P. Maxwell; Graduation: May 2002 (NC A&T SU)
Project Topic/Title: "Manufacturing Execution System for the ALIVE Automated and Packaging System"
Employment/Location upon Graduation: The Boeing Company, St. Louis, MO

B.S. Undergraduate Honors Theses Completed

Jan Marsh; Graduation: May 2008
Thesis Topic/Title: "The Impact of Film Pulsation on Film Cooling"
Employment/Location upon Graduation: Siemens Power Generation / Master Student, Department of Mechanical, Materials and Aerospace Engineering, University of Central Florida, Orlando, FL

Sameer Khan; Graduation: Dec 2006
Thesis Topic/Title: "Probabilistic Stress Rupture Life Analysis of Turbine Blades"
Employment/Location upon Graduation: Siemens Power Generation / Master Student, Department of Mechanical, Materials and Aerospace Engineering, University of Central Florida, Orlando, FL

B.S. Undergraduate Honors Theses in Progress *(Working Title/Topic)*

Erik Hogan; Graduation: May 2009
Thesis Topic/Title: "The Development of a Streamlined Process for Optimizing the Material Constants in the Miller Unified Constitutive Model"

HONORS, AWARDS AND SPECIAL RECOGNITIONS

- *Recipient*, College of Engineering and Computer Science Award for Excellence in Graduate Teaching (2008)
- *Nominee*, INFORMS Optimization Society Prize for Young Researchers (2006)
- Marquis Who's Who in Science and Engineering (2006-Present)
- *Nominee*, National Science Foundation Alan T. Waterman Award (2003)
- *Recipient*, Historically Black Engineering College Future Engineering Faculty Fellowship (2000-2001)
- *Recipient*, Purdue University Research Foundation Grant (1999-2000)
- Purdue University Dean's List (1993-2001)

HONORS, AWARDS AND SPECIAL RECOGNITIONS OF ADVISEES

- Cesar Casanas
  - UCF Student Government Association Graduate Travel Award (2007; 2008)
    - To present research at the 2007 IIE Industrial Engineering Research Annual Conference in Nashville, TN
    - To present research at the 2008 IIE Industrial Engineering Research Annual Conference in Vancouver, British Columbia, Canada
  - UCF Greater Orlando GK-12 Graduate Fellowship (2007-2008) – Awarded to students who have a strong interest in working with K-12 math and science teachers to improve science education and establish a long lasting connection with K-12 education
- Hamidreza Eskandari
  - Nominee for the INFORMS Optimization Society Prize for Young Researchers (2006)
  - UCF Graduate Research Fellowship (2006)
  - Participant at the 2006 Annual IIE/CIEADH Doctoral Student Colloquium in Orlando, FL
  - UCF Student Government Association Graduate Travel Award (2005)
    - To present research at the 2005 Institute of Operations Research and the Management Sciences Annual Meeting in San Francisco, CA.
- Oscar E. Martinez
  - UCF Student Government Association Graduate Travel Award (2007; 2008)
    - To present research at the 2007 IIE Industrial Engineering Research Conference in Nashville, TN
    - To present research at the 2008 Production and Operations Management Society Annual Meeting in La Jolla, CA
- Tarek M. Shaalan
  - Participant at the 2006 INFORMS Future Academician Colloquium in Pittsburgh, PA
  - Who's Who Among Students Award (2006)
  - Frank Hubbard Engineering Graduate Scholarship (2005-2006; 2006-2007) – Awarded based on student extracurricular activities and community service
  - UCF Student Government Association Graduate Travel Award (2006) to present research at the Institute of Operations Research and the Management Sciences Annual Meeting in Pittsburgh, PA.
- Abeer T. Sharawi
  - UCF Student Government Association Graduate Travel Award (2007)
    - To present research at the 2007 IIE Industrial Engineering Research Annual Conference in Nashville, TN
- Anthony L. Williams
  - UCF Greater Orlando GK-12 Graduate Fellowship (2006-2007) – Awarded to students who have a strong interest in working with K-12 math and science teachers to improve science education and establish a long lasting connection with K-12 education

PROFESSIONAL SERVICE

- Institute of Industrial Engineers
  - 2008 Applied Ergonomics Student Design International Competition, Orlando, FL
    - Faculty Advisor, Nov 2007 – Mar 2008
      - UCF Student Design Team won 3rd Place Honors
  - IIE UCF Student Chapter
    - Faculty Advisor, Sep 2007 – Present
      - UCF Student Chapter won 3rd Place Honors in the 2008 Regional Student Technical Paper Competition at Mississippi State University, Starkville, MS
  - IIE Central Florida Professional Chapter
    - *Board Member*, Sep 2007 – Present
  - Industrial Engineering Research Annual Conference
    - Nashville, TN, May 19-23, 2007
      - *Session Chair – Single and Parallel Machine Scheduling*
      - *Session Chair –Models for Emergency Management Systems*
    - Orlando, FL, May 20-24, 2006
      - *Session Organizer*
      - *Session Chair – Manufacturing Design*
    - Houston, TX, May 15-19, 2004
      - *Session Organizer*
      - *Session Chair – Heuristic Methods for Real-World Scheduling Problems*
- Institute of Operations Research and the Management Sciences
  - National Meeting, San Francisco, CA, Nov 13-Nov 16, 2005
    - *Session Chair – Multicriteria Decision Making Analysis: Modeling and Applications II*
- Society of Manufacturing Engineers
  - *Recording Secretary – Northern Piedmont Chapter 304/082* (2002-2003)
- Production and Operations Management Society
  - Annual Conference, Chicago, IL, Apr 29-May 2, 2005
    - *Session Organizer*
    - *Session Chair – Scheduling & Logistics – From the Shop Floor to the Extended Enterprise*
- International Conference on Industry, Engineering, and Management Systems
  - 11th Annual Conference, Cocoa Beach, FL, Mar 14-16, 2005
    - *Session Chair – Operations Management I*
  - 10th Annual Conference, Cocoa Beach, FL, Mar 15-17, 2004
    - *Session Chair – Lean Manufacturing*
- National Science Foundation Proposal Review Panelist
  - The Integrative Graduate Education and Research Traineeship (IGERT) program
    - *Pre-Proposal Reviewer* (Jul 2004; Jun 2006)
    - *Full Proposal Reviewer* (Jan 2005)
- Office of Naval Research
  - Historically Black Engineering College Future Engineering Faculty Fellowship Program Committee
    - *Alumni Fellow Liaison* (2005-Present)
    - *Reviewer* (2003-Present)
- Ad-Hoc Technical Reviewer
  - *IEEE Transactions on Semiconductor Manufacturing* (2007-Present)
  - *Journal of Heuristics* (2006-Present)
  - *OMEGA* (2006-Present)
  - *International Journal of Operations Research* (2006-Present)
  - *International Journal of Production Research* (2005-Present)
  - *Computers and Industrial Engineering* (2005-Present)
  - ASME International Design Engineering Technical Conferences & Computers and Information In Engineering Conference (2005-Present)
  - *International Journal of Innovation and Technology Management* (2005-Present)

- *Journal of Intelligent Manufacturing* (2004-Present)
- *Journal of Manufacturing Systems* (2003-Present)
- *Decision Support Systems* (2002-2003)
- *International Journal of Operations and Quantitative Management* (2002-2003)
- *IIE Transactions on Logistics and Scheduling* (1997-2001)

UNIVERSITY-LEVEL SERVICE

University of Central Florida

- University of Central Florida Journal of Undergraduate Research
  - *Editorial Board Member* (2005-Present)
  - *Reviewer* (2004-Present)
- National Merit Scholar Freshman Scholars Program
  - *Mentor* (2005-Present)

North Carolina A&T State University

- University Senate – *Senator* (2003); *Alternate* (2002-2003)

COLLEGE-LEVEL SERVICE

University of Central Florida

- College of Engineering and Computer Science Grade Appeals Committee (2005-2006)
- Minority Engineering and Computer Science Program Faculty Advisory Committee
  - *Member* (2005-2006)

North Carolina A&T State University

- Multidisciplinary Design & Manufacturing Committee
  - *Member* (2002-2003)

DEPARTMENT-LEVEL SERVICE

University of Central Florida

- Graduate Program Assessment Coordinator (2008-Present)
- Graduate Program Curriculum Committee (2004-2006; 2007-Present)
  - *Chair* (2004-2006)
- Ph.D. Simulation Modeling & Analysis Qualifying Examination Committee (2004-Present)
  - *Chair* (2005-Present)
- Ph.D. Operations Research Qualifying Examination Committee (2007-Present)
  - *Chair* (2007-Present)
- M.S. Simulation Modeling & Analysis Oral Examination Committee (2004-Present)
  - *Chair* (2005-2007)

North Carolina A&T State University

- Undergraduate Program Committee (2002-2003)
- Alumni Network Committee (2002-2003)
  - *Chair* (2002-2003)

- Scholarship Fundraising Committee (2002-2003)
  - *Chair* (2002-2003)
- Departmental Newsletter
  - *Editor* (2002-2003)
- Academic Advisor for Sophomore Class (Class of 2005)
  - Approximately 65 students (2002-2003)

OTHER INVITED PRESENTATIONS, WORKSHOPS AND PANEL PARTICIPATION

Past Activities

1. **C.D. Geiger**, "The Nuts & Bolts of an Academic Job Search," Invited Speaker by the University of Central Florida Office of Career Services Career and Professional Development Symposium, Orlando, FL, Sep 9, 2008.
2. **C.D. Geiger**, "Navigating the Academic Job Search Process," Invited Speaker by the University of Central Florida Office of Career Services, Orlando, FL, Mar 21, 2008.
3. **C.D. Geiger**, "Demystifying the Academic Job Search Process," Invited Speaker by the University of Central Florida Department of Industrial Engineering and Management Systems, Orlando, FL, Feb 25, 2008.
4. **C.D. Geiger**, "A Career in Academia: The Academic Job Search – Are You Preparing?," Invited Speaker by the University of Central Florida Graduate Student Association, Orlando, FL, Sep 18, 2007.
5. **C.D. Geiger**, "A Guide to a Successful Academic Job Search," National Consortium for Graduate Degrees for Minorities in Engineering and Science, Inc. (GEM) 8th Annual Future Faculty & Professionals Symposium, Chicago, IL, Jun 28-30, 2006.
6. **C.D. Geiger**, "The Search Process Step-by-Step – Preparing for and Navigating the Interview and Negotiation Process," CNY-PR AGEP 3rd Annual Fellows/Mentors Meeting, Cornell University, Ithaca, NY, Jun 15-17, 2006.
7. **C.D. Geiger**, "Start Early – Tips That You'll Need to Prepare for the Faculty Job Search," PROMISE – Maryland Alliance for Graduate Education and the Professoriate – Summer Success Institute, Columbia, MD, Aug 19-20, 2005.
8. **C.D. Geiger**, "Preparing for the Academic Job Market: The Do's and the Don'ts," National Society of Black Engineers 31st Annual National Convention, Boston, MA, Mar 23-27, 2005.
9. **C.D. Geiger**, "Strategies for Preparing to Enter the Faculty Professoriate" 1st Annual Office of Naval Research / Historically Black Engineering Colleges Future Engineering Faculty Fellowship Program Symposium, Greensboro, NC, Jan 9-10, 2005.
10. **C.D. Geiger**, F.R. Williams, M.E. McBride, D.R. Brown, and D.B. Dunn, "Transitioning from Doctoral Student into the Faculty Professoriate: A Panel Discussion," 1st Annual Office of Naval Research / Historically Black Engineering Colleges Future Engineering Faculty Fellowship Program Symposium, Greensboro, NC, Jan 9-10, 2005.
11. **C.D. Geiger**, "Tips and Strategies for Surviving the Academic Job Search," Society of Hispanic Professional Engineers 27th National Technical and Career Conference, Dallas, TX, Jan 5-9, 2005.
12. **C.D. Geiger**, "A Guide to a Successful Academic Job Search," National Consortium for Graduate Degrees for Minorities in Engineering and Science, Inc. (GEM) 6th Annual Future Faculty & Professionals Symposium, Las Vegas, NV, Jun 9-11, 2004.
13. **C.D. Geiger**, B. Albright, S.K. Hargrove, D. Redman, and J.C. Rutledge, "Becoming a Great Mentor: A Panel Discussion," National Consortium for Graduate Degrees for Minorities in Engineering and Science, Inc. (GEM) 6th Annual Future Faculty & Professionals Symposium, Las Vegas, NV, Jun 9-11, 2004.
14. **C.D. Geiger** and L. Copenhaver, "Lean Manufacturing: An Overview," Society of Manufacturing Engineers, Northern Piedmont Chapter 304/082, Greensboro, NC, Oct 23, 2003.
15. **C.D. Geiger**, "Preparing for the Academic Job Market," National Consortium for Graduate Degrees for Minorities in Engineering and Science, Inc. (GEM) 5th Annual Faculty Bridge Seminar, Houston, TX, May 27-31, 2003.
16. **C.D. Geiger**, J.C. Rutledge, S.K. Hargrove, and K. Butler, "The Mentoring Process – from Choosing A Mentor to Becoming a Great Mentor: A Panel Discussion," National Consortium for Graduate

Degrees for Minorities in Engineering and Science, Inc. (GEM) 5th Annual Faculty Bridge Seminar, Houston, TX, May 27-31, 2003.

17. **C.D. Geiger**, "Tips for Preparing for the Job Market as a PhD Student," Industrial and Systems Engineering Department Doctoral Seminar, North Carolina A&T State University, Greensboro, NC, Apr 4, 2003.
18. **C.D. Geiger**, "How to Be a Successful Industrial and Systems Engineering Student," Industrial and Systems Engineering Department Freshman Colloquium, North Carolina A&T State University, Greensboro, NC, Mar 20, 2003.
16. **C.D. Geiger**, "Assisting the Education of an Alpha Man," Alpha Phi Alpha Fraternity, Inc. Indiana District (State) Convention, Indianapolis, IN, Feb 19, 2000.

COMMUNITY SERVICE AND OUTREACH ACTIVITIES

University of Central Florida

- US FIRST Robotics Regional Competition
  - Orlando, FL; Mar 10-12, 2005; Team Website Judge
  - Orlando, FL; Mar 9-11, 2004; Team Queueing (Lead Queuer), Team Website Judge

PROFESSIONAL SOCIETY MEMBERSHIPS

- Institute of Industrial Engineers
  - Central Florida Chapter 104 (2004-Present)
  - Piedmont Triad Chapter 163 (2002-2003)
- Institute for Operations Research and the Management Sciences (1997-Present)
- American Society for Engineering Education (2002-2007)
- Society of Manufacturing Engineers
  - Orlando Chapter 60 (2004-2005)
  - Northern Piedmont Chapter 304/082 (2002-2003)
    - *Chapter Secretary* (2002-2003)

OTHER MEMBERSHIPS AND AFFILIATIONS

- Carla Macon Granville Industrial Engineering Scholarship Foundation
  - *Founding Member* (1998-Present)
  - *Program Manager* (2002-2003)
- Alpha Phi Alpha Fraternity, Inc. (1989-Present)
  - *Indiana District Convention 2000 Speaker*
  - *Life Member* (1995-Present)
  - *Undergraduate Chapter Graduate Advisor* (Purdue University 1994-1995; 1998-2001)

HOBBIES AND INTERESTS

Weight Training; Racquetball; Wine Tasting