

David Bergman

Associate Professor

Operations and Information Management Department
School of Business, University of Connecticut

(Updated February 1, 2021)

CONTACT INFORMATION	Phone: 914-473-6100 Email: david.bergman@uconn.edu Website: http://www.business.uconn.edu/person/david-bergman/																
PROFESSIONAL EXPERIENCE	<p>School of Business, University of Connecticut (UConn), Storrs, CT</p> <p>Department of Operations and Information Management</p> <table><tr><td>Associate Professor</td><td>Aug 2019 - Present</td></tr><tr><td>Assistant Professor</td><td>Aug 2014 - Jul 2019</td></tr><tr><td>Visiting Assistant Professor</td><td>Aug 2013 - Jul 2014</td></tr></table> <p>McKinsey & Company, Waltham, MA</p> <p>McKinsey Analytics, Public and Social Sector Analytics</p> <table><tr><td>External Advisor</td><td>Oct 2017 - Present</td></tr><tr><td>Data Scientist Specialist</td><td>Jan 2017 - Jul 2017</td></tr><tr><td>Knowledge Specialist</td><td>Aug 2016 - Dec 2016</td></tr></table> <p>Mitsubishi Electric Research Labs, Cambridge, MA</p> <p>Data Analytics</p> <table><tr><td>External Consultant</td><td>Sep 2014 - Present</td></tr><tr><td>Visiting Researcher</td><td>Jun 2014 - Aug 2014</td></tr></table>	Associate Professor	Aug 2019 - Present	Assistant Professor	Aug 2014 - Jul 2019	Visiting Assistant Professor	Aug 2013 - Jul 2014	External Advisor	Oct 2017 - Present	Data Scientist Specialist	Jan 2017 - Jul 2017	Knowledge Specialist	Aug 2016 - Dec 2016	External Consultant	Sep 2014 - Present	Visiting Researcher	Jun 2014 - Aug 2014
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EDUCATION	<p>Tepper School of Business, Carnegie Mellon University (CMU), Pittsburgh, PA</p> <p>Ph.D., Algorithms, Combinatorics, and Optimization May 2013</p> <ul style="list-style-type: none">• Focus in Operations Research• Dissertation: <i>New Techniques for Discrete Optimization</i>• Committee Members: John Hooker (co-advisor), Willem-Jan van Hoeve (co-advisor), R. Ravi, Tuomas Sandholm <p>M.S., Algorithms, Combinatorics, and Optimization May 2010</p> <p>Stony Brook University, Stony Brook, NY</p> <p>M.S., Applied Mathematics & Statistics May 2008</p> <ul style="list-style-type: none">• Concentration in Operations Research <p>B.S., Mathematics and Applied Mathematics & Statistics May 2007</p>																
PROFESSIONAL INTERESTS	Operations research, management science, discrete optimization, data science, business analytics, integration of analytics techniques, sports analytics																
PROFESSIONAL LICENSES	Certified Analytics Professional																

McKinsey & Company

Aug 2016 - Present

Designing algorithms for large-scale automated decision making

- *Crop planning*: Implemented an optimization model for planning inventory for annual crop plan
- *COVID Testing Tool*: Created a tool for optimizing scarce testing resources to different portions of the population to minimize Rt rate across multiple segments of the US population
- *Public Housing Authority Property Optimization*: Designed and implemented an optimization algorithm and tool to assist a housing authority determine a plan for redevelopment for their portfolio of affordable housing in the face of increased funding pressure and quickly deteriorating properties
- *Bank Branch Optimization*: Improved optimization model for determining branch network opening and closing to maximize expected revenue, leading to orders-of-magnitude reduction in both solution time and memory consumption
- *Military Training Scheduling*: Built custom tool for scheduling all training activities and asset transfers for an entire military force, increasing force readiness from 60% to near 100%
- *Delivery Service Time Series Modeling*: Created predictive models for major parcel delivery client to uncover market trends and align long-term plans
- *Airline Crew Scheduling*: Constructed optimization algorithm for pilot crew scheduling for a \$2 billion airline to size impact of upcoming regulations on pilot working hours
- *Military Procurement Modeling*: Designed optimization algorithm to optimize over a billion dollars of procurement decisions
- *University Grant Funding*: Integrated predictive and prescriptive analytics models for allocation of grant funding for a large public university to optimize yield and quality of incoming class
- *Chemical Plant Simulation and Optimization Modeling*: Generated simulation model for large chemical plant to understand bottleneck in production process and an optimization algorithm to maximize plan throughput
- *Water Network Design*: Assisted with implementing an optimization model to measure cost-saving potential from consolidating treatment plants

Mitsubishi Electric Research Laboratories

Sep 2014 - Present

Developing optimization algorithms for large multinational electronics and electrical equipment manufacturing company for various service lines and products

Westchester Management, LLC

Jul 2010 - Present

Creating and maintaining information systems for residential real estate company

BlueVoyant

Jan 2018 - Mar 2018

Constructed advanced analytics models for cybersecurity risk assessment

Additech, Inc

Jul 2015 - Jul 2016

Integrating advanced data science and optimization algorithms to select expansion locations to maximize expected revenue for at-the-pump gasoline additive company

HONORS,
GRANTS,
AND AWARDS

- 2020 DraftKings Daily Fantasy Sports World Champion** December 2020
Won fantasy sports world championship competition with top prize of \$2.5M.
- UConn School of Business Research Award** May 2020
Received annual award for best researcher over five-year span.
- Optimizing Team Composition: Theoretical and Computational Advancements** Nov 2018 - Oct 2020
Army Research Institute for the Behavioral and Social Sciences (ARI), Solicitation number: W911NF-18-S-0001
Tannenbaum, S. I., Mathieu, J. E., and Bergman, D.
- UConn-AAUP Teaching Excellence: Early Career Award** April 2018
Annual university-wide teaching award given by the University of Connecticut's Chapter of The American Association of University Professors, Inc., honoring teaching excellence for faculty with fewer than 6 years of teaching experience.
- OPIM Department Summer Enhancement Grant** August 2015
Summer research grant awarded by OPIM department, for research on multiobjective optimization
- ACP Doctoral Research Award** Sep 2014
Annual research award given by the Association for Constraint Programming for the best doctoral dissertation in the area of constraint programming
- UConn Curriculum Development** May 2014
\$11,000.00 awarded for the development of undergraduate course 3510 - *Business Data Analytics*
- CMU Graduate Student Teaching Award** Apr 2012
Annual university-wide award recognizing best graduate student teacher at Carnegie Mellon University
- First Place, CMU McKinsey Case Competition** Oct 2011
Annual team-based case competition administered in the Tepper School of Business at Carnegie Mellon University
- Egon Balas Award** Mar 2010
Annual award recognizing best student paper in the area of Operations Research or Algorithms, Combinatorics, and Optimization at Carnegie Mellon University
- William Larimer Mellon Fellowship** Feb 2008
Three-year fellowship awarded for doctoral work in the Tepper School of Business at Carnegie Mellon University

EDITORIAL
ROLES

Editor for *Constraints*

BOOKS

D. Bergman, A. A. Cire, W.-J. van Hoes, and J.N. Hooker. *Decision Diagrams for Optimization*. Springer-Verlag New York, 2016.

PATENTS

Arvind U Raghunathan, **David Bergman**, Nikolaos V Sahinidis, Systems and Methods for Resource Allocation for Management Systems, Pat# 10,362,139 (Granted)

Arvind U Raghunathan, **David Bergman**, Thiago Serra Azevedo Silva, Systems and Methods for Joint Control of Multi-Modal Transportation Networks. Filed: Oct 17, 2017 as 15/785,540 (Filed)

Arvind U Raghunathan, **David Bergman**, Hiroyuki Hashimoto, Shingo Kobori, System and Method for Scheduling Multiple Modes of Transportation. Filed: Dec 6, 2018 as 62/689,064 (Filed)

Thiago Serra, Arvind U Raghunathan, **David Bergman**, System and Method for Scheduling Multiple Modes of Transport with Incomplete Information. Filed: Feb 25, 2019 as 16/284,229 (Filed)

Arvind U Raghunathan, **David Bergman**, Hiroyuki Hashimoto, System and Method for Scheduling Electric Generators using Decision Diagrams. Filed: Mar 26, 2019 as 16/364,471 (Filed)

ARTICLES
UNDER
REVIEW

D. Bergman, C.H. Cardonha., and S. Mehrani. Optimization Algorithms for the Bin Packing Problem with Minimum Color Fragmentation.

D. Bergman, T. Huang, and J. Mathieu. Data-Driven Optimization for Team Formation.

A.U. Raghunathan, **D. Bergman**, J.N. Hooker, T. Serra and S. Kobori. Seamless Multimodal Transportation Scheduling. *INFORMS Journal on Computing*, Major Revision.

Q. Cappart, **D. Bergman**, L.M. Rousseau, and I. Prémont-Schwarz. Learning Dynamic Programming Approximations for Combinatorial Optimization Problems.

D. Bergman, C.H. Cardonha, J.P. Imbrogno, and L. Lozano. Optimization for Maximizing the Expected Value of Order Statistics.

D. Bergman, S. Bhattacharjee, R. Day, and M. Emadikhiav. Designing a Sustainable Backhaul Framework using Telematics Sensor Data and Analytics.

H. Atef Yekta, **D. Bergman**, and R. Day. On Finding Stable and Efficient Solutions for the Team Formation Problem.

M. Goyal, **D. Bergman**, and P. S. Duggirala. Generating Longest Counterexample: On the Cross-roads of Mixed Integer Linear Programming and SMT.

REFEREED
JOURNAL
PUBLICATIONS

T. Serra, T. Huang, A.U. Raghunathan, and **D. Bergman**. Template-based Minor Embedding for Adiabatic Quantum Optimization. *INFORMS Journal on Computing*, Accepted.

D. Bergman, M. Bodur, C.H. Cardonha, and A.A. Cire. Network Models for Multiobjective Discrete Optimization. *INFORMS Journal on Computing*. Accepted.

D. Bergman, T. Huang, P. Brooks, A. Lodi, and A.U. Raghunathan. JANOS: An Integrated Predictive and Prescriptive Modeling Framework. *INFORMS Journal on Computing*, Accepted.

M. Emadikhiav, **D. Bergman**, and R. Day. Consistent Routing with Simultaneous Pickups and Deliveries. *Production and Operations Management*, Accepted.

L.S. Lozano, **D. Bergman**, and J.C. Smith. On the Consistent Path Problem. *Operations Research*, Accepted.

D. Bergman and L.S. Lozano. Decision Diagram Decomposition for Quadratically Constrained Binary Optimization. *INFORMS Journal on Computing*, Accepted.

T. Huang, **D. Bergman**, and R. Gopal. Predictive and Prescriptive Analytics for Location Selection of Add-on Retail Products. *Production and Operations Management*, to appear.

D. Bergman. An Exact Algorithm for the Quadratic Multiknapsack Problem with an Application to Event Seating. *INFORMS Journal on Computing*, to appear.

D. Bergman, C.H. Cardonha, A.A. Cire, and A. Raghunathan. On the Minimum Chordal Completion Polytope. *Operations Research*, to appear.

D. Bergman and A.A. Cire. Discrete Nonlinear Optimization by State-Space Decompositions. *Management Science*, to appear.

D. Bergman and J.P. Imbrogno. Surviving an NFL Survival Pool. *Operations Research*, volume 65(4), pages 1343-1354, 2017.

D. Bergman, A.A. Cire, W.-J. van Hoeve, and J.N. Hooker. Discrete Optimization with Decision Diagrams. *INFORMS Journal on Computing*, volume 18(1), pages 47-66, 2016.

D. Bergman and A.A. Cire. Theoretical Insights and Algorithmic Tools for Decision Diagram-Based Optimization. *Constraints*, volume 21(4), pages 533-556, 2016.

D. Bergman, A.A. Cire, and W.-J. van Hoeve. Lagrangian Bounds from Decision Diagrams. *Constraints*, volume 20(3), pages 346-361, 2015.

D. Bergman, A. A. Cire, W.-J. van Hoeve, and J.N. Hooker. Optimization Bounds from Binary Decision Diagrams. *INFORMS Journal on Computing*, volume 26(2), pages 253-268, 2014.

D. Bergman and J. N. Hooker, Graph coloring inequalities from all-different systems. *Constraints*, volume 19(4) pages 404-433, 2014.

D. Bergman, A.A. Cire and W.-J. van Hoeve. MDD Propagation for Sequence Constraints. *Journal of Artificial Intelligence Research*, volume 50, pages 697-722, 2014.

D. Bergman, A.A. Cire, W.-J. van Hoeve, and T. Yunes. BDD-Based Heuristics for Binary Optimization. *Journal of Heuristics*, volume 20(2), pages 211-234, 2014.

REFEREED
CONFERENCE
PUBLICATIONS¹

T. Serra, A.U. Raghunathan, **D. Bergman**, J.N. Hooker, and S. Kobori. Last-Mile Scheduling Under Uncertainty. *CPAIOR 2019*, accepted.

D. Bergman, C.H. Cardonha, and S. Mehrani. Binary Decision Diagrams for Bin Packing with Minimum Color Fragmentation. *CPAIOR 2019*, accepted.

Q. Cappart, E. Goutierre, **D. Bergman**, and L.M. Rousseau. Improving Optimization Bounds using Machine Learning: Decision Diagrams meet Deep Reinforcement Learning. *Proceedings of the 33rd AAAI Conference on Artificial Intelligence (AAAI 2019)*, accepted, 2018.

A.U. Raghunathan, **D. Bergman**, J.N. Hooker, T. Serra and S. Kobori. The Integrated Last-Mile Transportation Problem (ILMTP). *Proceedings of the International Conference on Automated Planning and Scheduling (ICAPS 2018)*, pages 388-398, 2018.

¹Note that refereed conference proceedings are the preferred academic outlet in computer science

D. Bergman and A.A. Cire. On Finding the Optimal Relaxed Decision Diagram. *Proceedings of the International Conference on Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems (CPAIOR 2017)*, volume 10335 of Lecture Notes in Computer Science, pages 41-50, 2017.

D. Bergman and A.A. Cire. Multiobjective Optimization by Decision Diagrams. *Proceedings of the International Conference on Principles and Practice of Constraint Programming (CP 2016)*, volume 9892 of Lecture Notes in Computer Science, pages 86-95, 2016.

D. Bergman and A.A. Cire. Decomposition Based on Decision Diagrams. *Proceedings of the International Conference on Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems (CPAIOR 2016)*, volume 9676 of Lecture Notes in Computer Science, pages 45-54, 2016.

D. Bergman, A.A. Cire, and W.-J van Hoeve. Improved Constraint Propagation via Lagrangian Decomposition. *Proceedings of the International Conference on Principles and Practice of Constraint Programming (CP 2015)*, volume 9255 of Lecture Notes in Computer Science, pages 30-38, 2015.

D. Bergman and A. Raghunathan. A Benders Approach to the Minimum Chordal Completion Problem. *Proceedings of the International Conference on Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems (CPAIOR 2015)*, volume 9075 of Lecture Notes in Computer Science, pages 47-64, 2015.

D. Bergman, A.A. Cire, A. Sabharwal, H. Samulowitz, W.-J van Hoeve. DDX10: Parallel Combinatorial Optimization with Decision Diagrams. *Proceedings of the International Conference on Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems (CPAIOR 2014)*, volume 8451 of Lecture Notes in Computer Science, pages 351-367, 2014.

D. Bergman, A.A. Cire, W.-J. van Hoeve, and J.N. Hooker. Variable Ordering for the Application of BDDs to the Maximum Independent Set Problem. *Proceedings of the International Conference on Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems (CPAIOR 2012)*, volume 7298 of Lecture Notes in Computer Science, pages 34-49, 2012.

D. Bergman and J.N. Hooker. Graph Coloring Facets from All-Different Systems. *Proceedings of the International Conference on Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems (CPAIOR 2012)*, volume 7298 of Lecture Notes in Computer Science, pages 50-65, 2012.

D. Bergman, W.-J. van Hoeve, and J.N. Hooker. Manipulating MDD Relaxations for Combinatorial Optimization. *Proceedings of the International Conference on Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems (CPAIOR 2011)*, volume 6697 of Lecture Notes in Computer Science, pages 20-35, 2011.

EXTENDED
ABSTRACTS

T. Huang, **D. Bergman**, and R. Gopal [Abstract]. Predictive and Prescriptive Analytics for Location Selection of Add-on Retail Products. *2019 INFORMS Workshop on Data Mining and Decision Analytics*.

D. Bergman. New Techniques for Discrete Optimization [Extended Dissertation Abstract]. *Constraints*, volume 20(4), pages 486-487, 2015.

D. Bergman, A. A. Cire, W.-J. van Hoeve, and J.N. Hooker. Discrete Optimization with Decision Diagrams [Extended Abstract]. *Proceedings of the International*

Conference on Principles and Practice of Constraint Programming (CP 2015) , to appear.

D. Bergman, A.A. Cire and W.-J. van Hoeve. MDD Propagation for Sequence Constraints [Extended Abstract]. *Proceedings of the International Conference on Principles and Practice of Constraint Programming (CP 2015)* , to appear.

D. Bergman, A.A. Cire, and W.-J van Hoeve. Lagrangian Bounds from Decision Diagrams [Extended Abstract - Paper Selected for *Journal Fast Track*]. *Proceedings of the International Conference on Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems (CPAIOR 2015)* , volume 9075 of Lecture Notes in Computer Science, page XIV, 2015.

D. Bergman, A.A. Cire, W.-J van Hoeve, and J.N. Hooker. Optimization Bounds from Binary Decision Diagrams [Extended Abstract]. *Proceedings of the International Conference on Principles and Practice of Constraint Programming (CP 2014)* , volume 8656 of Lecture Notes in Computer Science, pages 903-907, 2014.

CONFERENCE /
INVITED TALKS

Optimization and Machine Learning

- Guest Lecture—Questrom School of Business, Boston University. Boston, MA. January 2020.

On the Consistent Path Problem

- INFORMS Annual Meeting 2019. Seattle, WA. Oct 2019.

Academia versus Industry – Which Career Path is Right For You

- Carnegie Mellon University—Student INFORMS Chapter Invited Talk. March 2019.

Decision diagram decomposition with an application to multimodal transportation scheduling

- Leeds School of Business University of Colorado Boulder—Invited Seminar. Feb 2019.

Computational optimization: concepts, trends, and modern applications

- School of Business, University of Connecticut—School Wide Research Seminar. Jan 2018.

Discrete Nonlinear Optimization by State-Space Decompositions

- University of Cincinnati Operations, Business Analytics, and Information Systems Seminar Series, Cincinnati, Ohio, March 2018.
- Cirrelt Seminar, Montreal, Canada, January 2018.
- INFORMS Annual Meeting 2017. Houston, TX. October 2017.
- Applied Mathematics and Statistics Department Seminar, Johns Hopkins University. October 2017. [Click to access video on YouTube.](#)
- 2017 Mixed Integer Programming Workshop. Montreal, Canada. June 2017.
- Clemson University Department Seminar. Clemson, SC. Jan 2017.

Decision Diagram Decomposition

- ISAIM 2016 - The International Symposium on Artificial Intelligence and Mathematics. Ft. Lauderdale, Fl. Jan 2016.

- INFORMS Annual Meeting 2015. Philadelphia, PA. Nov 2015.

MDD Propagation for Sequence Constraints

- 21st International Conference on Principles and Practice of Constraint Programming. Cork, Ireland. Sept. 2015.

A Benders Approach to the Minimum Chordal Completion Problem

- 12th International Conference on Integration of Artificial Intelligence (AI) and Operations Research (OR) techniques in Constraint Programming (CPAIOR 2015). Barcelona, Spain. May 2015.

Computational Techniques for Incentive Auctions

- INFORMS Annual Meeting 2014. San Francisco, CA. Nov 2014.

Solving Binary Quadratic Programming with Decision Diagrams

- CORS/INFORMS Annual Meeting, 2015. Montreal, Canada. Jun 2015.
- INFORMS Annual Meeting 2014. San Francisco, CA. Nov 2014.

New Techniques for Discrete Optimization

- 20th International Conference on Principles and Practice of Constraint Programming. Lyon, France. Sept. 2014.

Parallel Combinatorial Optimization with Decision Diagrams

- 11th International Conference on Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems. Cork, Ireland. May 2014.

Decision Diagrams for Discrete Optimization

- College of Business Department Seminar, Stony Brook University. March 2017.
- 15th Haifa Workshop on Graph Theory, Combinatorics, and Algorithms. Haifa, Israel, Jun 2015.
- CMU Chemical Engineering Department Seminar. Pittsburgh, PA. Nov 2014.
- INFORMS Annual Meeting 2013. Minneapolis, MN. Oct 2013.
- Operations and Information Management Department Seminar Series, University of Connecticut. Storrs, CT. Apr 2013.
- Department of Applied Mathematics and Statistics Seminar Series, Johns Hopkins University. Baltimore, MD. Mar 2013.
- Management Department Seminar Series, University of Iowa. Iowa City, IA. Feb 2012.
- BAE Systems Seminar. Burlington, MA. Dec 2012.

Bounds from Multiple Binary Decision Diagrams

- INFORMS Annual Meeting 2012. Phoenix, AZ. Oct 2012.

Variable Ordering for the Application of Binary Decision Diagrams to the Maximum Independent Set Problem

- 9th International Conference on Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems. Nantes, France. May 2012.

Manipulating MDD Relaxations for Combinatorial Optimization

- 8th International Conference on Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems. Berlin, Germany. May 2011.
- INFORMS Annual Meeting 2011. Charlotte, NC. Nov 2011.
- Algorithms Seminar, Stony Brook University. Stony Brook, NY. March 2010.

Facets for All-Different Systems

- Doctoral Programme, 16th International Conference on Principles and Practice of Constraint Programming. St. Andrews, Scotland. Sep 2010.

Graph Coloring Cuts for All-Different Systems

- 54th Annual conference of the Canadian Operational Research Society and the 10th International Conference on Multiple Objective Programming and Goal Programming. Niagara Falls, Canada. Jun 2012.
- 12th Annual Modeling and Optimization: Theory and Applications Conference. Bethlehem, PA. Jul 2012.

A Branch and Bound Algorithm Based on Approximate Binary Decision Diagrams.

- Cirrelt Seminar, University of Montreal. Montreal, Canada. Jan 2012.
- INFORMS Optimization Society Conference. Miami, Fl. Feb 2012.

Polyhedral Results for All-Different System

- INFORMS Annual Meeting 2010. Austin, TX. Nov 2010.

KEYNOTE ADDRESSES

Make the Best of the Next 168 Hours

- School of Business, University of Connecticut—MSBAPM Graduation Ceremony. May 2018.

POSTER PRESENTATIONS

Bounds from Binary Decision Diagrams

- Mixed Integer Programming Workshop 2012. Davis, California. Jul 2012.

Optimization for Food Rescue Program

- 2nd International Conference on Computational Sustainability. Cambridge, MA. Jun 2010.

Facets for All-different Systems

- 16th International Conference on Principles and Practice of Constraint Programming. Davis, California. St. Andrews, Scotland. Sep 2010.

MEDIA MENTIONS

[UConn Today Feature Article](#) on [Surviving an NFL Survival Pool](#), published in *Operations Research*.

TEACHING
EXPERIENCE

Instructor

OPIM 5603: Statistics in Business Analytic, Fall 2020, Fall 2019, Fall 2018, Fall 2017

- Graduate course in the Business Analytics and Project Management M.S. degree program at the University of Connecticut
- Course includes R programming and an introduction to probability and statistics

OPIM 5641: Business Decision Modeling. Spring 2016.

- Graduate course in the Business Analytics and Project Management M.S. degree program at the University of Connecticut
- Course includes spreadsheet modeling and optimization.

OPIM 3510: Business Data Analytics. Fall 2015, Spring 2015, Fall 2014.

- Undergraduate course in Business Data Analytics major in the School of Business at the University of Connecticut
- Course includes data visualization, predictive analytics, and optimization

OPIM 5272: Business Process Modeling and Data Management. Fall 2020, Fall 2019, Fall 2018, Spring 2018, Fall 2017, Fall 2014, Spring 2014, Fall 2013.

- Graduate course in the Business Analytics and Project Management M.S. degree program at the University of Connecticut
- Course covers database design and implementation

OPIM 3506: Business Application Programming. Spring 2014, Fall 2013.

- Undergraduate course in the Business and Technology major in the School of Business at the University of Connecticut
- Course covers programming for developing applications for businesses Required course in the Business and Technology major
- Course is fully administered online, including assignments, exams, lectures, etc.

BUS 70-374: Forecasting and Data Mining. Spring 2011.

- Undergraduate course in the Tepper School of Business at Carnegie Mellon University
- Upper-level elective course for Business major
- Designed this new course, including the drafting of all course materials, which are still used today, both in undergraduate and graduate courses at Carnegie Mellon University

SERVICE

Association for Constraint Programming Executive Committee Member and Secretary

- Voted as member of Executive Committee
- Selected as Secretary by President

Conference Program Committee Member

- CPAIOR - International Conference on Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 2015, 2016, 2017
- CP - International Conference on Principles and Practice of Constraint Programming, 2015, 2016, 2017
- AAAI - Conference on Artificial Intelligence, 2015, 2016, 2017

- IJCAI - International Joint Conference on Artificial Intelligence, 2015, 2016, 2017, 2018
- ICORES - International Conference on Operations Research and Enterprise Systems, 2017, 2018
- Lash - Workshop on Logic and Search, 2014.

Conference Organization

- CP 2019 - Conference Chair
- CPAIOR 2018 - Master Class Chair
- CP 2018 - Operations Research Track - Chair
- CP 2017 - Operations Research Track - Chair
- CORS/INFORMS International Conference 2015 - Cluster Chair, Session Chair
- CP 2015 - Doctoral Program Chair
- CPAIOR 2015 - Publicity Chair, Session Chair
- CPAIOR 2016 - Session Chair
- ACP Summer School 2016 - Co-organizer

Competitions

- 2018 INFORMS Student Competition Judge

Professional Memberships

- The Institute for Operations Research and the Management Sciences (INFORMS); INFORMS New York Metro Chapter

Reviewer

- Swiss National Science Foundation Ambizione Grant reviewer
- Ad-hoc reviewer for the following journals: INFORMS Journal on Computing; International Conference on Principles and Practice of Constraint Programming; International Conference on Integration of Artificial Intelligence and Operations Research Techniques in Constraint Programming; International Joint Conference on Artificial Intelligence; Journal of Combinatorial Optimization; The Journal of Artificial Intelligence Research; Mathematical Programming Computation; Constraints; Annals of Mathematics and Artificial Intelligence; Production and Operations Management; Management Information Systems Quarterly. European Journal of Operational Research; Production and Operations Management.