

Thiago Serra

University of Iowa
Iowa City, IA

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RESEARCH INTERESTS

Theory, applications, and social impact of machine learning and mathematical optimization.

EDUCATION

Ph.D.	<i>Operations Research</i>	Carnegie Mellon University	2018	Advisor: J. Hooker
♦ Gerald L. Thompson Dissertation Award in Management Sciences				
M.S.	<i>Operations Research</i>	Carnegie Mellon University	2015	
M.S.	<i>Computer Science</i>	University of Sao Paulo	2012	Advisor: Y. Wakabayashi
B.S.	<i>Computer Engineering</i>	University of Campinas	2008	Advisor: A. V. Moura
Certificate of Studies Abroad			IST, University of Lisbon	2007

ACADEMIC APPOINTMENTS

University of Iowa , Iowa City, IA	
<i>Assistant Professor of Business Analytics</i>	Since August 2024
Bucknell University , Lewisburg, PA	
<i>Assistant Professor of Analytics and Operations Management</i>	August 2019 – July 2024
<i>Affiliate Faculty in Latin American Studies</i>	September 2022 – July 2024
The University of Alabama Graduate School , Tuscaloosa, AL	
<i>Affiliate Faculty of Information Systems, Statistics and Management Science</i>	July 2022 – May 2025

INDUSTRY, CONSULTING, AND VISITING POSITIONS

Mitsubishi Electric Research Labs , Cambridge, MA	
<i>Visiting Research Scientist</i>	June 2018 – June 2019
<i>Summer Intern</i>	May 2017 – August 2017
<i>Summer Intern</i>	May 2016 – August 2016
Petrobras , Sao Paulo, SP, Brazil	
<i>Operations Research Analyst</i>	June 2009 – June 2013
Neolog , Sao Paulo, SP, Brazil	
<i>Optimization Consultant</i>	June 2008 – June 2009

PUBLICATIONS

Currently Under Review or In Preparation

1. J. Huchette, G. Munoz, T. Serra, and C. Tsay: When Deep Learning Meets Polyhedral Theory: A Survey. Submitted to INFORMS Journal on Computing.
Available on arXiv: <https://arxiv.org/abs/2305.00241>.

2. N. Boyd, M. Intindola, T. Serra, and J. Hunter (editors): Interdisciplinary Narratives on Artificial Intelligence & Personnel Selection Systems. **The International Journal of Human Resource Management**. Special issue with expected publication in Summer 2025.

Refereed Journal Papers

3. A. Raghunathan, D. Bergman, J. Hooker, T. Serra, and S. Kobori: Seamless Multimodal Transportation Scheduling. *INFORMS Journal on Computing*. 36(2):336–358, 2024.
4. T. Serra, T. Huang, A. Raghunathan, and D. Bergman: Template-based Minor Embedding for Adiabatic Quantum Optimization. *INFORMS Journal on Computing* 34(1):427–439, 2021.
5. E. Balas and T. Serra: When Lift-and-Project Cuts are Different. *INFORMS Journal on Computing* 32(3):822–834, 2020.
6. T. Serra: Reformulating the Disjunctive Cut Generating Linear Program. *Annals of Operations Research* 295:363–384, 2020.
♦ First Place at the Poster Competition of the INFORMS 2016 Annual Meeting
7. T. Serra and R. J. O’Neil: MIPLIBing: Seamless Benchmarking of Mathematical Optimization Problems and Metadata Extensions. *SN Operations Research Forum* 1:24, 2020.
8. T. Serra and J. Hooker: Compact Representation of Near-Optimal Integer Programming Solutions. *Mathematical Programming* 182:199–232, 2020.

Refereed International Conference Papers

9. J. Tong^B, J. Cai^B, and T. Serra: Optimization Over Trained Neural Networks: Taking a Relaxing Walk. In *Proceedings of the 21st International Conference on the Integration of Constraint Programming, Artificial Intelligence, and Operations Research (CPAIOR 2024)*.
^B Bucknell students.
10. J. Cai^{* B}, K. Nguyen^{* B}, N. Shrestha^B, A. Good^B, R. Tu^B, X. Yu, S. Zhe, and T. Serra: Getting Away with More Network Pruning: From Sparsity to Geometry and Linear Regions. In *Proceedings of the 20th International Conference on the Integration of Constraint Programming, Artificial Intelligence, and Operations Research (CPAIOR 2023)*.
^B Bucknell students.
* Equal contribution.
♦ Finalist of the 2023 INFORMS Undergraduate Operations Research Prize
11. A. Florio, P. Martins, M. Schiffer, T. Serra, and T. Vidal: Optimal Decision Diagrams for Classification. In *Proceedings of the 37th AAAI Conference on Artificial Intelligence (AAAI 2023)*.
12. A. Good^{* B}, J. Lin^{* B}, X. Yu^{*}, H. Sieg^B, M. Ferguson^B, S. Zhe, J. Wiecek, and T. Serra: Recall Distortion in Neural Network Pruning and the Undecayed Pruning Algorithm. In *Proceedings of the 36th Conference on Neural Information Processing Systems (NeurIPS 2022)*.
^B Bucknell students.
* Equal contribution.
13. X. Yu^{*}, T. Serra^{*}, S. Ramalingam, and S. Zhe: The Combinatorial Brain Surgeon: Pruning Weights That Cancel One Another in Neural Networks. In *Proceedings of the 39th International Conference on Machine Learning (ICML 2022)*.
* Equal contribution.
14. C. Riera, C. Rey, T. Serra, E. Puertas, and O. Pujol: Training Thinner and Deeper Neural Networks: Jumpstart Regularization. In *Proceedings of the 19th International Conference on the*

Integration of Constraint Programming, Artificial Intelligence, and Operations Research (CPAIOR 2022).

15. T. Serra, X. Yu, A. Kumar, and S. Ramalingam: Scaling Up Exact Neural Network Compression by ReLU Stability. In *Proceedings of the 35th Conference on Neural Information Processing Systems (NeurIPS 2021)*.
16. T. Serra and S. Ramalingam: Empirical Bounds on Linear Regions of Deep Rectifier Networks. In *Proceedings of the 34th AAAI Conference on Artificial Intelligence (AAAI 2020)*.
17. T. Serra, A. Kumar, and S. Ramalingam: Lossless Compression of Deep Neural Networks. In *Proceedings of the 17th International Conference on the Integration of Constraint Programming, Artificial Intelligence, and Operations Research (CPAIOR 2020)*.
♦ **Third Place at the Poster Competition of the LatinX in AI Workshop at ICML 2020**
18. T. Serra: Enumerative Branching with Less Repetition. In *Proceedings of the 17th International Conference on the Integration of Constraint Programming, Artificial Intelligence, and Operations Research (CPAIOR 2020)*.
19. T. Serra, A. Raghunathan, D. Bergman, J. Hooker, and S. Kobori: Last-Mile Scheduling Under Uncertainty. In *Proceedings of the 16th International Conference on the Integration of Constraint Programming, Artificial Intelligence, and Operations Research (CPAIOR 2019)*.
20. T. Serra*, C. Tjandraatmadja*, and S. Ramalingam: Bounding and Counting Linear Regions of Deep Neural Networks. In *Proceedings of the 35th International Conference on Machine Learning (ICML 2018)*.
* Equal contribution.
♦ **Princeton Day of Optimization Best Poster Award: Optimization and Machine Learning**
21. A. Raghunathan, D. Bergman, J. Hooker, T. Serra, and S. Kobori: The Integrated Last-Mile Transportation Problem (ILMTP). In *Proceedings of the 28th International Conference on Automated Planning and Scheduling (ICAPS 2018)*.
22. T. Serra, G. Nishioka, and F. Marcellino: The Offshore Resources Scheduling Problem: Detailing a Constraint Programming Approach. In *Proceedings of the 18th International Conference on Principles and Practice of Constraint Programming (CP 2012)*.

Patents

23. T. Serra, A. Raghunathan, and D. Bergman:
System and Method for Scheduling Multiple Modes of Transport with Incomplete Information.
US Patent 11,085,781, granted on August 2021.

GRANTS AND FUNDRAISING

Grants Submitted

- (Pending) Collaborative Research: MFAI: Enabling Robust Artificial Intelligence for Power Grids and Critical Infrastructure through Mathematical Optimization (co-PI)
PI: Mathieu Tanneau (Georgia Tech)
Other co-PIs: Reza Zandehshahvar (Georgia Tech) and Andrea Lodi (Cornell Tech)
National Science Foundation (NSF) 362,390 USD (co-PI) / 1,141,619 USD

Grants Awarded

2021–2025	CRII: RI: RUI: Principled Methods for Compressing Neural Networks through Discrete Optimization and Polyhedral Theory (<u>PI</u>) National Science Foundation (NSF) Award # 2104583	174,847 USD
2022–2023	Student Support and Mentorship Program for CPAIOR 2022 (<u>PI</u>) Co-PI: Phebe Vayanos (USC) National Science Foundation (NSF) Award # 2223504	9,963 USD

Other Fundraising Initiatives

CPAIOR 2024 (as Sponsorship Chair)	Artificial Intelligence Journal	4,000 EUR
	OptalCP	3,000 EUR
	CMU's Quantum Technologies Group	3,000 USD
	ACP	2,000 EUR
	Google	2,000 USD
	nextmv	1,000 USD
	Gurobi	1,000 USD
	MERL	1,000 USD
	The Optimization Firm	500 USD
CPAIOR 2022 (as Sponsorship Chair)	INQA	300 EUR
	Artificial Intelligence Journal	11,000 EUR
	Gurobi	3,000 USD
	Google	2,000 USD
	nextmv	2,000 USD
	Kinaxis	1,500 USD
	The Optimization Firm	1,000 USD
	Lindo Systems	600 USD
	COSLING	300 EUR

INVITED PRESENTATIONS

TBD	Worcester Polytechnic Institute
TBD	MIT, Center for Transportation and Logistics
May 2025	CRM (Centre de Recherches Mathématiques), Montreal
Past	
Oct 2024	Indiana University Bloomington, Department of Computer Science
Oct 2024	University of Illinois Urbana-Champaign
Sep 2024	Georgia Institute of Technology, AI4OPT
Aug 2024	Gurobi Academic Webinar
May 2024	Amazon Modeling & Optimization (MOP) Seminar
Apr 2024	Fidelity AI Center
Mar 2024	AI / OR Workshop III (CCC / INFORMS / ACM SIGTAI), Challenge Problem

Nov 2023	The University of Iowa, Tippie College of Business
Jul 2023	Amazon Quantum Solutions Lab
Apr 2023	Syracuse University, Electrical Engineering and Computer Science Department
Apr 2023	Georgia Institute of Technology, AI4OPT Seminar Series
Aug 2022	University of Pittsburgh, Industrial Engineering Department
Jul 2022	INFORMS MIF Webinar
Jun 2022	KTH Royal Institute of Technology, Stockholm Optimization Days (Invited speaker)
Mar 2022	University of Pavia, Department of Mathematics
Mar 2022	University of Sydney Business School
Dec 2021	Federal University of Paraiba, Logistics and Optimization Group
Dec 2021	INFORMS Webinar
Nov 2021	ACP Winter School on Decision Diagrams for Optimization
Nov 2021	The University of Iowa, Tippie College of Business
Oct 2021	INFORMS Teaching Effectiveness Colloquium
May 2021	MIP 2021 Workshop
Mar 2021	GERAD (Group for Research in Decision Analysis), Montreal
Feb 2021	UCLA, Institute for Pure and Applied Mathematics
Jan 2021	ORAI China Webinar
Nov 2020	University of Nebraska Omaha, Department of Mathematics
Nov 2020	Brazilian Symposium on Operations Research (Tutorial)
Oct 2020	The University of Alabama, The Culverhouse College of Business
Feb 2020	Google, New York City Office
Aug 2019	Carnegie Mellon University, YinzOR 2019 (Featured speaker)
Jul 2019	University of Campinas, Institute of Computing
May 2019	UCLA, Institute for Pure and Applied Mathematics
Apr 2019	Brown University, Computer Science Department
Mar 2019	University of Massachusetts Amherst, INFORMS Student Chapter
Dec 2018	Rensselaer Polytechnic Institute, Industrial and Systems Engineering
Dec 2018	Bucknell University, Freeman College of Management
Oct 2018	The University of Utah, School of Computing
Oct 2018	Colby College, Mathematics and Statistics Department
Jun 2018	Mitsubishi Electric Research Laboratories
Mar 2018	Carnegie Mellon University, Process Systems Engineering
Feb 2018	Brookhaven National Laboratory, Computational Science Initiative
Jun 2017	Northeastern University, INFORMS Student Chapter
May 2013	University of Campinas, IEEE Computational Intelligence Society Student Chapter

HONORS AND AWARDS

2024 ICML Best Reviewer Award (awarded to 214 out of 7,474 reviewers)

2024 INFORMS Senior Member (inaugural class)

2023 INFORMS Undergraduate Operations Research Prize Finalist (advisor)

2021 ICML Best Reviewers (top 10% of the reviewers)

2021 AAAI Outstanding Program Committee Award (awarded to 13 out of 9,493 PC members)

2020 Third Place at the Poster Competition of the LatinX in AI Workshop at ICML 2020

Graduate and Postdoctoral

2018 Princeton Day of Optimization Best Poster Award: Optimization and Machine Learning

2018 Carnegie Mellon Univ. Gerald L. Thompson Doctoral Dissertation Award in Management Science

2016 INFORMS Judith Liebman Award

2016 First Place at the Poster Competition of the INFORMS 2016 Annual Meeting

2011 Brazilian Symposium on Operations Research Best Paper Finalist

Undergraduate

2009 Brazilian Computing Society (SBC) Outstanding Student Award

2009 Sao Paulo Institute of Engineering (IE) Award

2009 Sao Paulo Reg. Board of Engineering, Architecture, and Agronomy (CREA) Honorable Mention

2007 ACM International Collegiate Programming Contest South America Bronze Medal

2006 Portuguese National Programming Contest (MIUP) Third Place

2005 ACM International Collegiate Programming Contest South America Bronze Medal

2004 ACM International Collegiate Programming Contest South America Bronze Medal

2003 Brazilian Olympiad in Informatics Gold Medal

MEDIA APPEARANCES

Interviews

- | | |
|----------|---|
| Oct 2023 | WVIA-TV Keystone Edition Business
A.I. and the Future of Work |
| Feb 2023 | INFORMS Resoundingly Human Podcast
Academic or Industry: Choosing your career path (and changing your mind)! |
| Jan 2022 | nextmv Blog
Optimization, why it matters, how it's changing, and more — an interview with Thiago Serra |
| Mar 2019 | UMass INFORMS YouTube Channel
UMass INFORMS Interview with Dr. Thiago Serra |
| Oct 2016 | ORMS Today
What's Your StORy? |

Quotes and Mentions

- Apr 2024 Bucknell Magazine
[Big Problem, Bigger Potential: How a cross-college team of students and faculty partnered with staff to solve one of the University's biggest puzzles](#)
- Mar 2024 Poets & Quants
[2024 Best & Brightest Business Major: Keri Gilligan, Bucknell University \(Freeman\)](#)
- Oct 2023 The Daily Item – Sunbury, PA (and other outlets owned by CNHI)
[Deepfake concerns growing along with AI technology](#)
[No law specifically against artificial images, but not new to courts either](#)
(These stories were part of the CNHI special series “The Rise of AI”)
- Sep 2023 The Bucknellian
[Bucknell research: smaller AI models can be more accurate, fairer](#)
- Jul 2023 Bucknell University News
[Bucknell Research: Smaller AI Models Can Be More Accurate, Fairer](#)
The Daily Item – Sunbury, PA
[Bucknell research: Smaller AI models can be more accurate](#)
The Standard-Journal – Milton, PA
[Researcher: Smaller AI models can be more accurate, fairer](#)
- May 2021 Bucknell University News
[Freeman College's Thiago Serra Receives NSF Award to Study Neural Networks](#)
The Daily Item – Sunbury, PA
[Bucknell professors gets \\$174k grant to streamline neural networks](#)
- Oct 2019 INFORMS Annual Meeting Blog
[Advice From the Academic Job Search Panel](#)
- Sep 2019 Tepper School of Business News & Events
[YinzOR Conference Brings Operations Research Experts to Tepper](#)
- Mar 2019 ORMS Today (co-author)
['Let's get better together': Six OR/MS students discuss how volunteering plays a role in shaping their lives](#)
- Nov 2018 INFORMS Annual Meeting e-News
[Joint Session Integer Programming/O.R. Frontiers: Machine Learning and Discrete Optimization II](#)
- Jun 2018 MERL News
[Best doctoral dissertation award received by Visiting Research Scientist Thiago Serra](#)
- Dec 2015 ORMS Today
[INFORMS NEWS: A Twitter recap of INFORMS 2015](#)
- Dec 2014 IFORS News
[INFORMS Annual Meeting Sets Record in Attendance, Excitement](#)
- Oct 2014 ShareAmerica – U.S. Department of State
[You can't learn it all in a classroom. These students share what they know about the U.S.](#)

PROFESSIONAL SERVICE

Leadership Roles

- Chair, INFORMS Computing Society, 2024 – 2025
- Vice Chair / Chair-Elect, INFORMS Computing Society, 2022 – 2023
- Chair, MIP Workshop Poster Award, 2023
- Sponsorship Chair, International Conference on the Integration of Constraint Programming, Artificial Intelligence, and Operations Research (CPAIOR), 2022 and 2024
- AI in Practice Chair, AAAI Conference on Artificial Intelligence (AAAI), 2021
- Chair, INFORMS Undergraduate Operations Research Prize, 2020
- President, INFORMS Student Chapter at Carnegie Mellon, 2015 – 2017
- Co-Founder and Secretary, INFORMS Student Chapter at Carnegie Mellon, 2014 – 2015

Editorial Board of Journals

- Associate Editor, International Transactions in Operational Research (ITOR), 2023 – Present

Senior Program Committee of Conferences

- AAAI Conference on Artificial Intelligence (AAAI), 2023 – 2025

Program Committee (or Equivalent) of Conferences

- International Conference on the Integration of Constraint Programming, Artificial Intelligence, and Operations Research (CPAIOR), 2024
- Neural Information Processing Systems (NeurIPS), 2021 – 2024
- International Conference on Machine Learning (ICML), 2021 – 2022, 2024
- International Conference on Learning Representations (ICLR), 2022 – 2023
- AAAI / ACM Conference on Artificial Intelligence, Ethics, and Society (AIES), 2022
- Annual Conference on Innovative Applications of Artificial Intelligence (IAAI), 2021
- AAAI Conference on Artificial Intelligence (AAAI), 2020 – 2021
- Learning and Intelligent Optimization Conference (LION), Automatic Solver Configuration Session, 2020

Conference Cluster or Track Chair

- Computing, INFORMS Annual Meeting, 2022 – 2023
- Computing, CORS-INFORMS International Conference, 2022
- Optimization Methods in Machine Learning, INFORMS Computing Society Conference, 2022
- Emerging Applications Track, INFORMS Optimization Society Conference, 2020

Panels and Special Participations

- Panelist, “Final Questions and Reflection”, 3rd Future BA Prof Workshop, Tippie College of Business, University of Iowa, August 2024
- Volunteer, “Role Playing Faculty Introductions”, 3rd Future BA Prof Workshop, Tippie College of Business, University of Iowa, August 2024

- Panelist, “Funding the Future: Proposal Development Workshop for Computer Scientists and Grants Officers”, The Council of Independent Colleges, March 2024
- Guest speaker, Student Awards Ceremony, INFORMS Annual Meeting 2023
- Panelist, “Broad and DEI-specific Funding Opportunities at NSF”, Minorities Issues Forum (MIF), INFORMS Annual Meeting 2023
- Panelist, “Funding the Future: Proposal Development Workshop for Computer Scientists and Grants Officers”, The Council of Independent Colleges, March 2023
- Panelist, “Optimization Myths, Misconceptions, and Imperfect Understandings”, Gurobi Workshop, INFORMS Annual Meeting 2022
- Moderator, “AI in Practice Panel: Forecasting in Unprecedented Times”, AAAI 2021
- Panelist, “Academic Job Market Panel”, INFORMS Annual Meeting 2019

Award Committees

- MIP Workshop Poster Award, 2023
- INFORMS Annual Meeting Poster Competition, 2021 – 2023
- INFORMS Minority Issues Forum (MIF) Paper Competition, 2022
- CORS Undergraduate Student Paper Competition (SPUC), 2022 – 2023
- INFORMS Undergraduate Operations Research Prize, 2018 – 2020

Other Roles in Conference Organizations

- INFORMS NavigatOR, INFORMS Annual Meeting, 2024
- INFORMS SQUAD, INFORMS Annual Meeting, 2023
- Co-Chair of Sponsored Sessions, CORS-INFORMS International Conference, 2022
- Outreach Chair, Annual Conference on Innovative Applications of AI (IAAI), 2021
- FacilitatOR, INFORMS Annual Meeting, 2020 – 2021
- Blogger, INFORMS Annual Meeting, 2012 & 2014 – 2019
- Twitter Curator, International Symposium on Mathematical Programming (ISMP), 2015

Other Roles in Professional Organizations

- Member, INFORMS Artificial Intelligence Roadmap Committee (AIR-Com), 2024
- Member, INFORMS Education Strategy Committee, 2017 – 2021
- Member, INFORMS K-12 Outreach Subcommittee, 2020 – 2021

Ad-hoc Journal Reviewer

- Annals of Operations Research (2018 – 2021)
- Artificial Intelligence (2024)
- Constraints (2018 – 2020)
- European Journal of Operational Research (2021 – 2023)
- IEEE Transactions on Neural Networks and Learning Systems (2020)
- International Transactions in Operational Research (2019 – 2021)
- Journal of Global Optimization (2020)
- Journal of Machine Learning Research (2022)

- Mathematical Programming (2019)
- Networks (2021)
- Operations Research Letters (2023 – 2024)
- SN Operations Research Forum (2022 – 2023)
- SIAM Journal on Applied Algebra and Geometry (2021 – 2022)
- TOP (2023 – 2024)
- The International Journal of Human Resource Management (2024)
- Transportation Research B: Methodological (2018 – 2019)

Conference Subreviewer

- AAAI Conference on Artificial Intelligence (AAAI), 2017
- American Control Conference (ACC), 2020 – 2021
- Conference on Integer Programming and Combinatorial Optimization (IPCO), 2021 – 2022
- International Conference on Current Trends in Theory and Practice of Computer Science (SOFSEM), 2024
- International Conference on Principles and Practice of Constraint Programming (CP), 2016 – 2017
- International Conference on the Integration of Constraint Programming, Artificial Intelligence, and Operations Research (CPAIOR), 2017 – 2019

RESEARCH SUPERVISION

Undergraduate Students at Bucknell University

- Sumit Dhar (Summer 2024)
- Aneesh Vyas (Summer 2024)
- Vy Tran (Summer 2024)
- Luke Snyder (Summer 2024)
- Aiden Ren (Spring 2024 – Summer 2024)
- Hung Pham (Spring 2024 – Summer 2024)
- Ibrahim Tahir (Spring 2024 – Summer 2024)
- Chang Min Bark (Fall 2023 – Spring 2024)
- Anh Tran (Fall 2023 – Spring 2024)
- Tegan Kelsall (Fall 2023 – Spring 2024)
- Avery Hood (Fall 2023 – Spring 2024)
- Jiatai Tong (Spring 2023 – Fall 2023)
- Clara Chaplin (Spring 2023 – Summer 2023)
- Tsugunobu Miyake (Spring 2023 – Fall 2023)
- Hunter Gehman (Spring 2023 – Spring 2024)
- Farhaj Shahid (Spring 2023)
- Jahnia Treadwell (Spring 2023 – Spring 2024)
- Linh Nguyen (Fall 2022 – Summer 2024)

- Changkun Guan (Fall 2022 – Spring 2024)
- Stanley Gai (Summer 2022 – Spring 2024)
- Yuqin Yang (Summer 2022 – Spring 2024)
- Rahul Sibal (Summer 2022)
- Junyang (Jeffrey) Cai (Spring 2022 – Spring 2023)
- Khai-Nguyen Nguyen (Spring 2022 – Spring 2023)
- Nishant Shrestha (Spring 2022 – Spring 2023)
- Ruisen Tu (Spring 2022 – Summer 2022)
- Alexander Simpson (Spring 2022 – Spring 2024)
- Jason Searles (Spring 2022)
- Sophia Wills (Spring 2022)
- Yanjing Huang (Spring 2022)
- Jiaqi (Jacky) Lin (Fall 2021 – Spring 2022)
- Mark Pesacreta (Fall 2021 – Spring 2022)
- Mikey Ferguson (Fall 2021 – Fall 2022)
- Alexa Horvath (Fall 2021 – Fall 2022)
- Pedro Carneiro Passos (Fall 2021)
- Aidan Good (Summer 2021 – Fall 2022)
- Hannah Sieg (Summer 2021 – Fall 2021)
- Thomas Stone (Summer 2021 – Fall 2021)
- Yinuo Jing (Summer 2021)
- Ethan Roberti (Spring 2021)
- James Andradas (Spring 2021 – Fall 2021)
- Georgia Corbett (Fall 2020)

Research Visitors

- Fabian Badilla (University of Chile, Chile, Summer 2023)

Honors Thesis Advised

- Mark Pesacreta, Bucknell University, Business Analytics, 2022

External Doctoral Thesis Committees

- Xin Yu, The University of Utah, School of Computing (defended in May 2024)
- Ehsan Mahyari, The University of Alabama, The Culverhouse College of Business (defended in March 2024)
- Matteo Cacciola, École Polytechnique de Montréal (defended in November 2023)

TEACHING EXPERIENCE

University of Iowa

BAIS 6130: Applied Optimization
Fall 2024: 25 students

M.S.

Instructor

Bucknell University

ANOP 390: Honors Course in Analytics and O.M.	Undergraduate	Instructor
Spring 2022: 1 student		
Fall 2021: 1 student		

ANOP 370: Prescriptive Analytics	Undergraduate	Instructor
Fall 2023: 20 students		
Fall 2022: 19 students		
Fall 2021: 22 students		

ANOP 310: Independent Study in Analytics and O.M.	Undergraduate	Instructor
Spring 2024: 4 students		
Fall 2023: 2 students		
Spring 2023: 1 student		
Fall 2022: 2 students		
Spring 2022: 3 students		
Spring 2021: 1 student		

ANOP 242: Database Management and Applied Data Analysis	Undergraduate	Instructor
Spring 2024: 18 students		

ANOP 203: Intro. to Programming for Business Analytics	Undergraduate	Instructor
Spring 2024: 20 and 14 students		
Fall 2023: 20 students		
Spring 2022: 23 and 18 students		
Spring 2021: 20 and 14 students		
Fall 2020: 19 students		
Spring 2020: 22 students		
Fall 2019: 21 students		

ANOP 102: Spreadsheet Modeling and Data Analysis	Undergraduate	Instructor
Fall 2022: 21 and 21 students		
Spring 2022: 21 students		
Fall 2021: 23 students		
Spring 2021: 23 students		
Fall 2020: 20 students		

MGMT 102: Quantitative Reasoning for Managers	Undergraduate	Instructor
Spring 2020: 23 students		
Fall 2019: 21 students		

Carnegie Mellon University

70-460: Mathematical Models for Consulting	Undergraduate	Instructor
Fall 2016: 25 students		

45-751: Optimization	MBA	Recitation Leader
Spring 2017		
Spring 2016		

06-805: Disjunctive Programming	PhD	Teaching Assistant
Spring 2016		

45-751: Optimization Fall 2015	MBA	Teaching Assistant
45-850: Applications of Operations Research Fall 2015	MBA	Teaching Assistant

University of Campinas

MC 326: File Structures Fall 2006	Undergraduate	Teaching Assistant
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TEACHING-RELATED TRAINING

<i>Early Career Faculty Academy</i>	University of Iowa	2024
<i>Neurodivergent College Professor Training</i>	Autism Virtually	2023
<i>Meeting of the Analytics Program Directors</i>	INFORMS Analytics Conference	2023
<i>Teaching Effectiveness Colloquium</i>	INFORMS Annual Meeting	2022
<i>Teaching Effectiveness Colloquium</i>	INFORMS Annual Meeting	2021
<i>Teaching Circles</i>	Teaching and Learning Center, Bucknell U.	2020
<i>Course Design and Pedagogy Workshop</i>	Teaching and Learning Center, Bucknell U.	2019
<i>Future Faculty Program</i>	Eberly Center, Carnegie Mellon U.	2014–17
<i>Teaching Effectiveness Colloquium</i>	INFORMS Annual Meeting	2017
<i>Teaching Effectiveness Colloquium</i>	INFORMS Annual Meeting	2016
<i>Acting for Non-Majors (Course)</i>	School of Drama, Carnegie Mellon U.	2015
<i>Language and Culture for Teaching (Course)</i>	ICC, Carnegie Mellon U.	2013

REFERENCES

Available upon request.