
**Business Meeting**

INFORMS Annual Meeting

Atlanta, October 27, 2025




# ICS Officers

**Thiago Serra** (University of Iowa) – Chair (2024-2025)
**Merve Bodur** (Universiyt of Edinburgh) – Vice-Chair (2024-2025) / Chair-Elect (2026-2027)
**Kai Pam** (Hong Kong Polytechnique University) – Secretary & Treasurer (2024-2025)
**Hamed Rahimian** (Clemson University) – Webmaster (since 2021)

# ICS Board

**Harsha Gangammanavar**
(Southern Methodist University, 2023-2025)
**Andre Cire**
(University of Toronto, 2024-2026)
**Beste Basciftci**
(University of Iowa, 2024-2026)
**Austin Buchanan**
(Oklahoma State University, 2025-2027)
**Ricardo Fukasawa**
(University of Waterloo, 2025-2027)

# Goodbyes & Elections

We will run an election for four positions:

- 1 Vice-chair (2026-2027) /
  Chair-elect (2028-2029)
- 1 Secretary / Treasurer (2026-2027)
- 2 Board members (2026-2028)

**Would you like to join ~~us~~ them?**

# ICS CLUSTER @INFORMS 2025

2 Parallel Tracks
(mostly in rooms
B201 & B202)

30 invited sessions
(given 28 slots)
137 talks

1 award session

7 sessions of other clusters
cross-listed with ICS


Session Titles

# Budget Report

As of August 31, 2025

| | Aug 2025 | Dec 2024 | Aug 2024 | Dec 2023 | Dec 2022 |
|---|---|---|---|---|---|
| **Revenue** (i.e., Dues, Interests, Sponsorships, and Conferences) | $8,521.58 | $10,019.91 | $3,032.92 | $3,780.32 | $42,471.84 |
| **Expenses** (i.e., Business Meetings, Membership Processing, Awards, and Conferences) | $313.18 | $7,163.44 | $96.08 | $5,106.91 | $49,857.33 |
| **Net Gain/Loss** | $8,208.40 | $2,856.47 | $2,936.84 | ($1,326.59) | ($7,385.49) |
| **Balance** – Beginning of Year | $46,273.70 | $43,417.23 | $43,417.23 | $44,743.82 | $52,129.31 |
| **Balance** – Period Ending | **$54,482.10** | $46,273.70 | $46,354.07 | $43,417.23 | $44,743.82 |

# Membership Statistics

As of August 31, 2025

| | Aug 2025 | Dec 2024 | Dec 2023 | Dec 2022 | Dec 2021 |
|---|---|---|---|---|---|
| **Total No. of Members** | 1,002 | 925 | 868 | 811 | 611 |

Comparable societies (as of Aug 2025): 1,109 (Optimization), 1,432 (MSOM), 646 (Simulation), 675 (Transportation), 683 (Information Systems), etc.

| | Regular | Student | Retired |
|---|---|---|---|
| **Membership Rate** | $10 | $0 | $5 |

# Thank you for joining us!

14-16 March 2025


**Organizing Committee**

Andre Augusto Cire (Co-chair)
Sheng Liu (Co-chair)
Thiago Serra
Merve Bodur
Maryam Daryalal
Kai Pan

**Cluster Chairs**

Ricardo Fukasawa, Thibaut Vidal, Bartolomeo Stellato, Andrea Lodi, Beste Basciftci, Sebastian Perez-Salazar, Ted Ralphs, Joaquim Dias Garcia, Ryan O'Neil, Boshi Yang, Willem-Jan Van Hoeve, Rui Zhang, Archis Ghate, Ian Yihang Zhu, Ivana Ljubic, Yasmine Beck, David Bernal Neira, Nasrin Yousefi, Andy Sun, Ahmed Aziz Ezzat, Alexandre Jacquillat, Setareh Farajollahlzadeh, Andrew Trapp

# Statistics

- **218 attendees (120 students, 3 retirees)**
  - ~ 7 could not attend due to Visa issues
- **59 sessions**
- **198 talks**
- **3 plenary speakers**
  - Simge Küçükyavuz, Sanjeeb Dash, Axel Parmentier
- **5 special sessions/tutorials**
- Budget was positive: **CAD $13,291.49**
- Funds split between GERAD and ICS

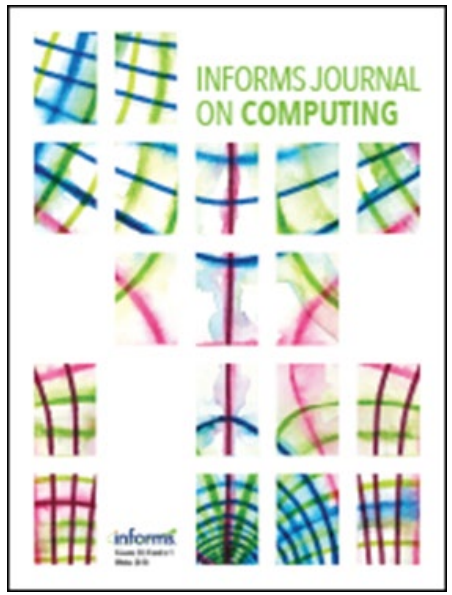
Our Platinum Sponsors

Our Gold Sponsors

Sponsors

# Nominations

1) ?
2) ??
3) ???
4) ????




# INFORMS Journal on Computing

INFORMS Annual Conference

October 2025

# Journal Background

First published in 1989 as *ORSA Journal on Computing*

2000+ total papers published so far

The theory and practice of computing and operations research are necessarily intertwined. *INFORMS Journal on Computing* publishes high quality papers that expand the envelope of operations research and computing. We seek original research papers on relevant theories, methods, experiments, systems, and applications. We also welcome novel survey and tutorial papers, and papers describing new and useful software tools. We expect contributions that can be built upon by subsequent researchers or used by practitioners.

2026- : Andrea Lodi

2019-2025: Alice E. Smith

2013–2018: David L. Woodruff

2007–2012: John W. Chinneck (term began July 2007)

2007–2007: W. David Kelton (April–May 2007, interim)

2007–2007: Prakash Mirchandani (January–March 2007)

2000–2006: W. David Kelton

1992–1999: Bruce Golden (term began with Issue 3 of 1992)

1987–1992: Harvey J. Greenberg (founding editor)

IJOC was originated in 1987 via the ORSA Computer Science Technical Section, and is still affiliated with that group's successor, the INFORMS Computing Society.

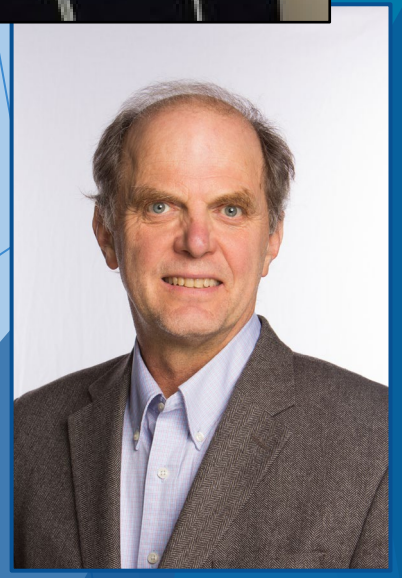
# Editorial Team - Oversight

EIC, Alice Smith (Auburn)

Managing Editor, Annie Stevenson (INFORMS)

**Advisory Board**

- John Chinneck (Carleton U)
- Bill Cook (U Waterloo)
- Bruce Golden (U Maryland)
- Karla Hoffman (George Mason)
- Robin Lougee (KnitWell Group)
- Francisco Saldanha-da-Gama (Sheffield University UK)
- Pascal Van Hentenryck (Georgia Tech)
- David Woodruff (Cal – Davis)



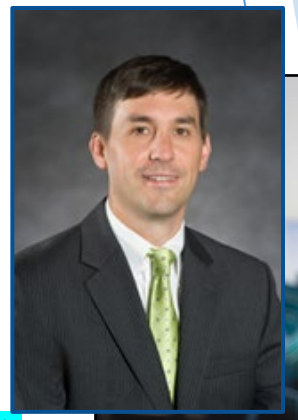
# Editorial Team - Areas

- **Applications in Biology, Medicine, and Healthcare**, Paul Brooks (VA Commonwealth U)
- **Computational Modeling: Methods and Analysis**, Pascal Van Hentenryck (Georgia Tech)
- **Data Science and Machine Learning**, Ram Ramesh (U Buffalo)
- **Design and Analysis of Algorithms - Continuous**, Antonio Frangioni (U Pisa)





- **Design and Analysis of Algorithms - Discrete**, Andrea Lodi (Cornell Tech)
- **Heuristic Search and Approximation Algorithms**, Erwin Pesch (U Siegen)
- **Network Optimization: Algorithms and Applications**, Russell Bent (Los Alamos National Laboratory)
- **Quantum Computing**, Giacomo Nannicini (U Southern California)
- **Simulation**, Bruno Tuffin (IRISA / INRIA)
- **Software Tools**, Ted Ralphs (Lehigh U)
- **Stochastic Models and Reinforcement Learning**, Nicola Secomandi (Rice U)


# Editorial Team - Associate Editors

- 93 associate editors
- Mean tenure of all editors is 4 years
- ~ 61% INFORMS members
- Many are Computing Society members
- Editors from (unordered list): United States, Canada, Brazil, Italy, France, Germany, Austria, Belgium, Belarus, China, India, Australia, The Netherlands, Hong Kong, United Kingdom, New Zealand, Israel

| | |
|---|---|
| Applications in Biology, Medicine, and Healthcare | 6 |
| Computational Modeling: Methods and Analysis | 11 |
| Data and Code Specialists | 4 |
| Data Science and Machine Learning | 15 |
| Design and Analysis of Algorithms – Continuous | 5 |
| Design and Analysis of Algorithms – Discrete | 16 |
| Heuristic Search and Approximation Algorithms | 5 |
| Network Optimization: Algorithms and Applications | 8 |
| Other | 0 |
| Quantum Computing | 3 |
| Simulation | 6 |
| Software Tools | 7 |
| Stochastic Models and Reinforcement Learning | 7 |
| Grand Total | 93 |

# 12 New Associate Editors (from four continents)

| Area | Full Name | Institution |
|---|---|---|
| Computational Modeling: Methods & Analysis | Merve Bodur | University of Edinburgh |
| Data & Software Specialists | Quentin Cappart | École Polytechnique de Montréal |
| Data & Software Specialists | Carlos H. Cardonha | University of Connecticut |
| Data & Software Specialists | Margarita Castro | Pontifica Universidad Católica de Chile |
| Data Science & Machine Learning | Ying Chen | Harbin Institute of Technology |
| Data Science & Machine Learning | Ajay Kumar | EMLYON Business School |
| Data Science & Machine Learning | Jin Li | Xi'an Jiaotong University |
| Design & Analysis of Algorithms-Continuous | Wim van Ackooij | EDF Lab Paris-Saclay |
| Quantum Computing | Sander Gribling | Tilburg University |
| Quantum Computing | Rebekah Herrman | University of Tennessee |
| Software Tools | Jorge E. Mendoza | HEC Montréal |
| Stochastic Models & Reinforcement Learning | Rui Gao | University of Texas at Austin |

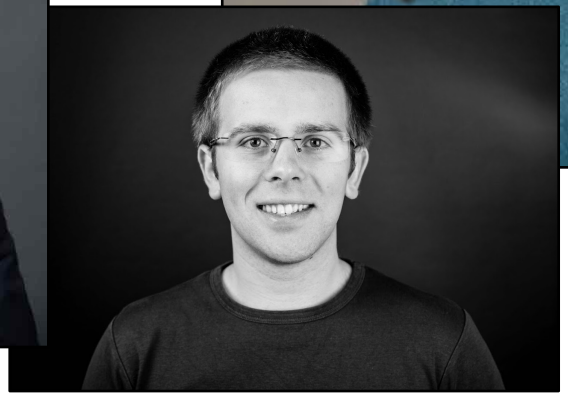
# New AEs – Mostly Early Career









# Accomplishments and News over Past Year

- **New Area**: Following the successful publishing of a **special issue on Quantum Computing** in the January / February 2025 issue, a new area was formed.

  The Quantum Computing Area publishes works at the intersection of QC and OR. The rapid development of quantum technologies benefits from the application of traditional OR techniques in different phases of chip design and operation; examples are uncertainty quantification, simulation, optimization, modeling. At the same time, algorithmic techniques in these and other areas could benefit from the different computational paradigm, which leads to provable speedups under certain conditions. All high-quality research works that study the use of OR techniques for problems arising in the design and operation of quantum computers, and those that study the development of OR techniques that benefit from the QC paradigm will be considered for publication. This includes theoretical, computational, and experimental work.

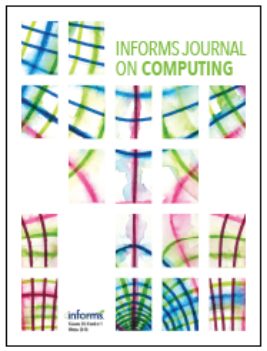
  Inaugural Area Editor:
  **Giacomo Nannicini** of USC.

- **New Data and Software Associate Editors**: The Data and Software team was implemented this year with four specialty associate editors. These editors lead the population of the IJOC GitHub repositories which are constructed for each accepted paper. These are **Quentin Cappart, Carlos Cardonha, Margarita Castro** and **Oscar Dowson**, who was the originator of these positions. We now have nearly 300 IJOC GitHub repositories published.
- **Two New Committees Active**: Generative AI and Archiving of Data, Code and Digital Artifacts.
- **Featured papers** (2 to 3) are chosen for each issue and authors notified and given free access. This has proved successful in further encouraging authors to submit their best work to IJOC.
- Former Editor-in-Chief of IJOC, John Chinneck, has been named a 2025 INFORMS Fellow.

# https://informsjoc.github.io/

# Nearly 300 Repositories

## INFORMS Journal on Computing




A site for hosting software and data repositories associated with papers appearing in the INFORMS Journal on Computing

View source on **GitHub**

Hosted on GitHub Pages — Theme by orderedlist

## Welcome to the IJOC Software and Data Repositories

This is the website for the GitHub repositories for hosting software and data associated with papers appearing in the INFORMS Journal on Computing.

### Available Software and Data

**PUBLISHED IN ARTICLES IN ADVANCE (AIA)**

- Demands Satiated or Not? A Psychology-Informed Deep Probabilistic Approach to Offline Store Recommendations by Jiangning He, Weikun Wu, Jiayi Guo, and Xiao Fang has associated software/data.
- Eliminating Social Popularity Bias in Recommendation: Causal Inference-Based Social Graph Neural Networks by Ruibin Geng, Ruina Yang, and Huilin Xu has associated software/data.
- Gamifying the Vehicle Routing Problem with Stochastic Requests by Nicholas Kullman, Nikita Dudorov, Martin Cousineau, Jorge Mendoza, and Justin Goodson has associated software/data.
- Stochastic Optimization Model with Exogenous and Decision-Dependent Uncertainty for Medical Evacuation by Miguel Lejeune, Francois Margot, and Alan Delgado de Oliveira has associated software/data.
- Quantifying the Academic Quality of Children's Videos Using Machine Comprehension by Sumeet Kumar, Mallikarjuna T., and Ashiqur KhudaBukhsh has associated software/data.
- Learning in Reformulation-Linearization Technique-Based Spatial Branching: Limitations of Strong Branching Imitation by Brais Gonzalez-Rodriguez, Ignacio Gomez-Casares, Bissan Ghaddar, Julio González Díaz, and Beatriz Pateiro-Lopez has associated software/data.
- Strong Partitioning and a Machine Learning Approximation for Accelerating the Global Optimization of by Rohit Kannan, Harsha Nagarajan, and Deepjyoti Deka has associated software/data.
- Responsible AI-Enabled Infodemic Management: A Hypergraph-based Infodemic Topic Prediction Framework by Luyue Zhao, Shuai Ding, Yidong Chai, Jiaheng Xie, Xiao Fang, and Shanlin Yang has associated software/data.

**PUBLISHED**

**Volume 37, Issue 5**

- On the Value of Risk-Averse Multistage Stochastic Programming in Capacity Planning by Xian Yu and Siqian Shen has associated software/data.
- A Stochastic Benders Decomposition Scheme for Large-Scale Stochastic Network Design by Dimitris Bertsimas, Ryan Cory-Wright, Jean Pauphilet, and Periklis Petridis has associated software/data.
- Exact Simulation of Quadratic Intensity Models by Yan Qu, Angelos Dassios, Anxin Liu, and Hongbiao Zhao has associated software/data.
- Average Case Subquadratic Exact and Heuristic Procedures for the Traveling Salesman 2-OPT Neighborhood by Giuseppe Lancia and Paolo Vidoni has associated software/data.
- Efficiently Constructing Convex Approximation Sets in Multiobjective Optimization Problems by Stephan Helfrich, Stefan Ruzika, and Clemens Thielen has associated software/data.
- An Iterative Exact Algorithm over a Time-Expanded Network for the Transportation of Biomedical Samples by Daniel Ocampo-Giraldo, Ana Anaya-Arenas, and Claudio Contardo has associated software/data.
- An Improved Combinatorial Benders Decomposition Algorithm for the Human-Robot Collaborative by Zhaofang Mao, Kan Fang, Enyuan Fu, and Michael Pinedo has associated software/data.
- Incorporating Promotional Effects in Sales Planning of the Retail Industry Using Geometric Programming by Melika Khandan and Pooya Hoseinpour has associated software/data.
- Branch-and-Price for the Capacitated Autonomous Vehicle Assisted Delivery Problem by Rui Zhang has associated software/data.
- Reproducible Feature Selection for High-Dimensional Measurement Error Models by Xin Zhou, Zemin Zheng, Jie Wu, and Jiarui Zhang has associated software/data.
- A Data-Driven Optimization Framework for Static Rebalancing Operations in Bike Sharing Systems by Junming Liu, Weiwei Chen, and Leilei Sun has associated software/data.
- Feature Selection and Grouping Effect Analysis for Credit Evaluation via Regularized Diagonal Distance Metric by Tie Li, Gang Kou, Yi Peng, and Philip S. Yu has associated software/data.

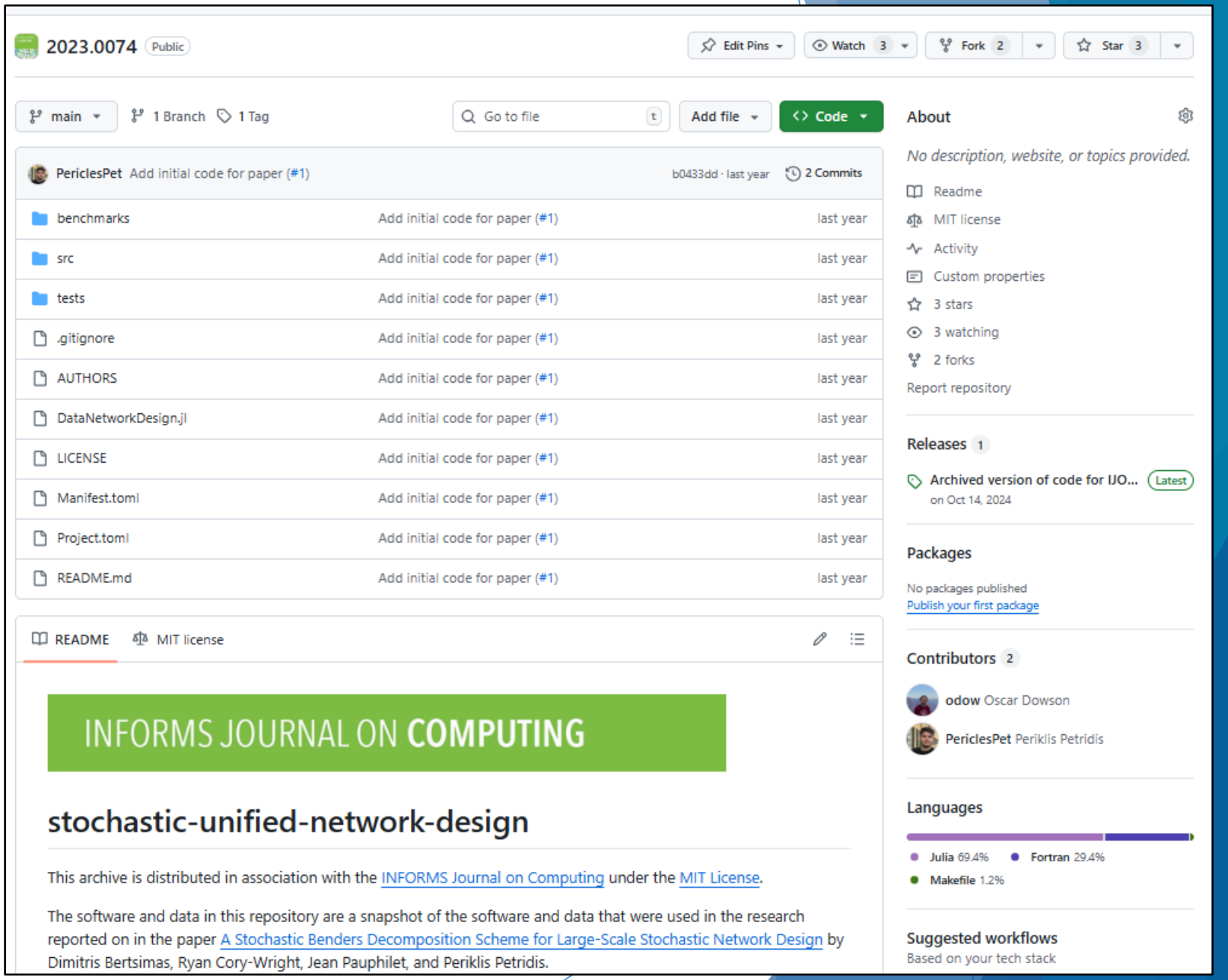
# Typical GitHub Landing Page

All materials are licensed
(most with MIT)

All are cross referenced to the paper

All have a separate DOI number for code and data

All are frozen



| Original Submissions | | | | | |
|---|---|---|---|---|---|
| | Submission Year | | | | |
| Area | 2021 | 2022 | 2023 | 2024 | 2025* |
| Applications in Biology, Medicine, & Healthcare | 26 | 18 | 31 | 29 | 30 |
| Computational Modeling: Methods & Analysis | 42 | 36 | 75 | 81 | 67 |
| Data Science & Machine Learning | 45 | 82 | 117 | 154 | 165 |
| Design & Analysis of Algorithms — Continuous | 30 | 21 | 19 | 21 | 26 |
| Design & Analysis of Algorithms — Discrete | 61 | 95 | 71 | 81 | 106 |
| Heuristic Search & Approximation Algorithms | 37 | 30 | 26 | 23 | 37 |
| Network Optimization: Algorithms & Applications | 29 | 31 | 41 | 37 | 50 |
| Other | 6 | 12 | 12 | 14 | 32 |
| Quantum Computing | - | - | - | - | 3 |
| Simulation | 21 | 17 | 25 | 24 | 17 |
| Software Tools | 13 | 15 | 24 | 17 | 22 |
| Stochastic Models & Reinforcement Learning | 34 | 24 | 20 | 22 | 16 |
| Special Issues | | | 47 | 86 | - |
| **Grand Total** | **344** | **381** | **508** | **589** | **571** |

*12 months ending in September 2025

# New Submissions

# Overall 52% Desk Rejects

# Acceptance Rates and Publishing Backlog

| Year | Acceptance Rate (%) | Backlog (in number of issues) |
|---|---|---|
| 2016 | 22.1 | 5.08 |
| 2017 | 27.6 | 8.08 |
| 2018 | 32.5 | 15.84 |
| 2019 | 23.9 | 21.75 |
| 2020 | 35.6 | 20.33 |
| 2021 | 25.9 | 9.48 |
| 2022 | 28.6 | 1.70 |
| 2023 | 26.6 | 7.76 |
| 2024 | 19.1 | 11.86 |
| **2025*** | **22.6** | **13.61** |

*12 months ending in September 2025

# Usage

| Year | 2 Year Impact Factor | Downloads |
|---|---|---|
| 2016 | 1.173 | 27180 |
| 2017 | 1.392 | 27718 |
| 2018 | 1.850 | 29157 |
| 2019 | 1.541 | 44916 |
| 2020 | 2.278 | 42943 |
| 2021 | 3.288 | 57467 |
| 2022 | 2.100 | 128009 |
| 2023 | 2.300 | 117445 |
| 2024 | 2.100 | 147994 |
| **2025** | **Not yet released** | **130034*** |

*9 months ending in September 2025

# First Decision Times for non-Rejected Papers (i.e., Only Papers with Revise First Decisions and Final Times for All non-Desk Rejected Papers

| Year | Median of # Days Between Original Submission & First Decision | Median of # Days Between Original Submission & Final Decision |
|---|---|---|
| 2013 | 148 | 382 |
| 2014 | 145 | 362 |
| 2015 | 161 | 406 |
| 2016 | 153 | 421 |
| 2017 | 170 | 519 |
| 2018 | 163 | 474 |
| 2019 | 146 | 415 |
| 2020 | 130 | 415 |
| 2021 | 126 | 362 |
| 2022 | 123 | 408 |
| 2023 | 131 | 376 |
| 2024 | 133 | 373 |
| **2025*** | **130** | **404.5** |

*9 months ending in September 2025

# First Decision Times for All Papers – With and Without Desk Rejects

| | | All | | W/O DRs |
|---|---|---|---|---|
| Journal Overall Median | | 36 | | 130 |
| | | | | |
| | | | | |
| Area Editor | # 1st&Final Decisions | # Days | # Reviewed 1st&Finals | # Days |
| Bent, Russell | 24 | 38.5 | 6 | 129.5 |
| Brooks, Paul | 25 | 24 | 6 | 135 |
| Frangioni, Antonio | 14 | 53 | 7 | 116 |
| LODI, ANDREA | 51 | 126 | 37 | 139 |
| Nannicini, Giacomo | 2 | 9.5 | 0 | 0 |
| Pesch, Erwin | 22 | 23 | 8 | 104 |
| Ralphs, Ted | 13 | 41 | 6 | 107 |
| Ramesh, Ram | 98 | 36.5 | 31 | 144 |
| Secomandi, Nicola | 12 | 26.5 | 2 | 120.5 |
| Smith, Alice/Admin | 26 | 15 | 4 | 128.5 |
| Tuffin, Bruno | 10 | 91 | 7 | 132 |
| Van Hentenryck, Pascal | 54 | 20.5 | 21 | 115 |

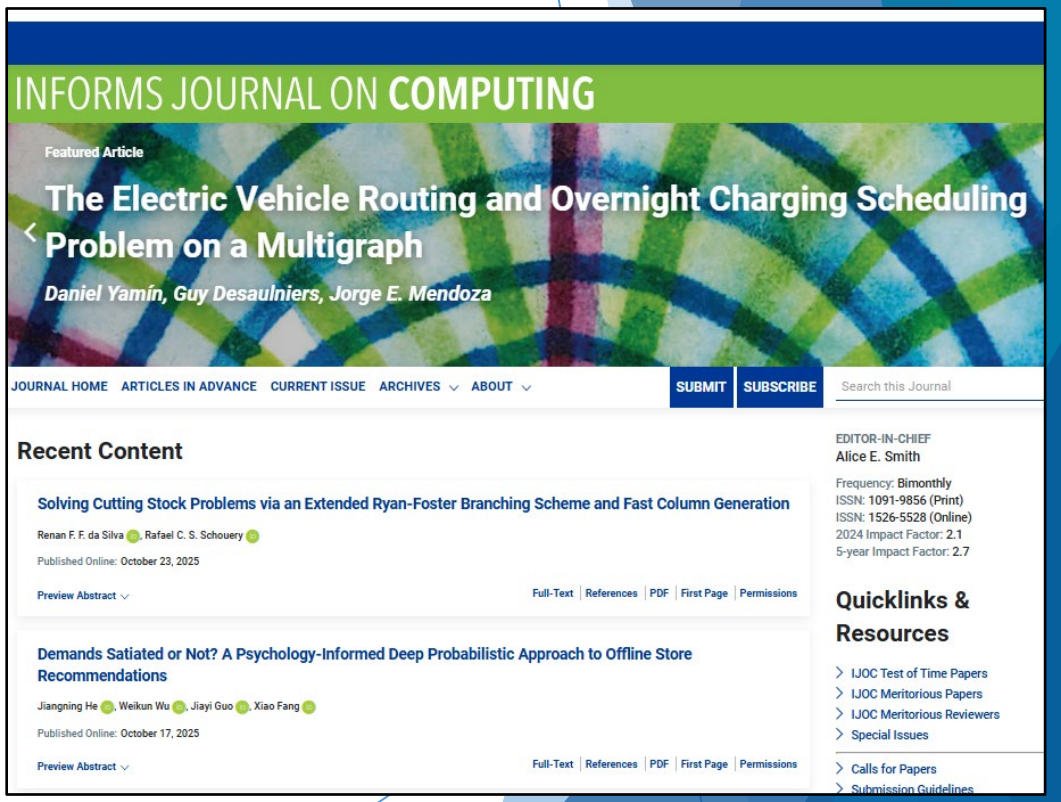
*9 months ending in September 2025

# Concerns and Issues

- **Calculation of median / mean times** has been discovered to be strange – INFORMS counts only non-rejects for time to first decision! This inflates the time significantly from other journals which include rejects as first decisions (including desk rejects). This can deter authors from submitting to INFORMS journals.
- **Publishing backlog** which can be fixed with a greater page budget in the future. That is an INFORMS leadership function.
- Evolution of the **data and code archiving** in terms of where it resides and the manner of its review and vetting. Our IJOC committee on this along with the workshop at the Annual Conference will provide guidance on this point.
- Continued advancement in both capability and in use of **generative artificial intelligence** and its impact on authorship and reviewing. Again, our IJOC committee focusing on this is poised to provide valuable guidance on this developing issue.
- Upcoming transition to **double blind reviewing**. While this is a controversial issue in scholarly publishing in terms of its effectiveness to eliminate bias in reviewing and even its relevance in this era of preprints, the INFORMS leadership has determined that this is the path forward. There are many issues for IJOC in terms of code and data sharing, conference paper overlap and referencing, previous publication overlap and referencing by the same author(s), and conflicts of interest which may exist but not be discovered in a timely manner.

# Ongoing Successes

- Journal is in solid shape with record submissions, downloads, editorial team size
- Bi-monthly publication is a suitable model for now
- The IJOC GitHub Code and Data Repository is fully operational and runs smoothly
- Every new issue TOC is announced in the INFORMS listservs
- Recognitions are ongoing (Meritorious Paper, Meritorious Reviewer, Test of Time Paper Award, Featured Papers)
- We are nearly caught up with the Test of Time Awards (a backlog of 3 more) so there can be one per year thereafter
- Test of Time papers have published author retrospectives
- Meritorious papers have free access
- Featured articles have free access only when they're clicked on from the front-page featured article bar

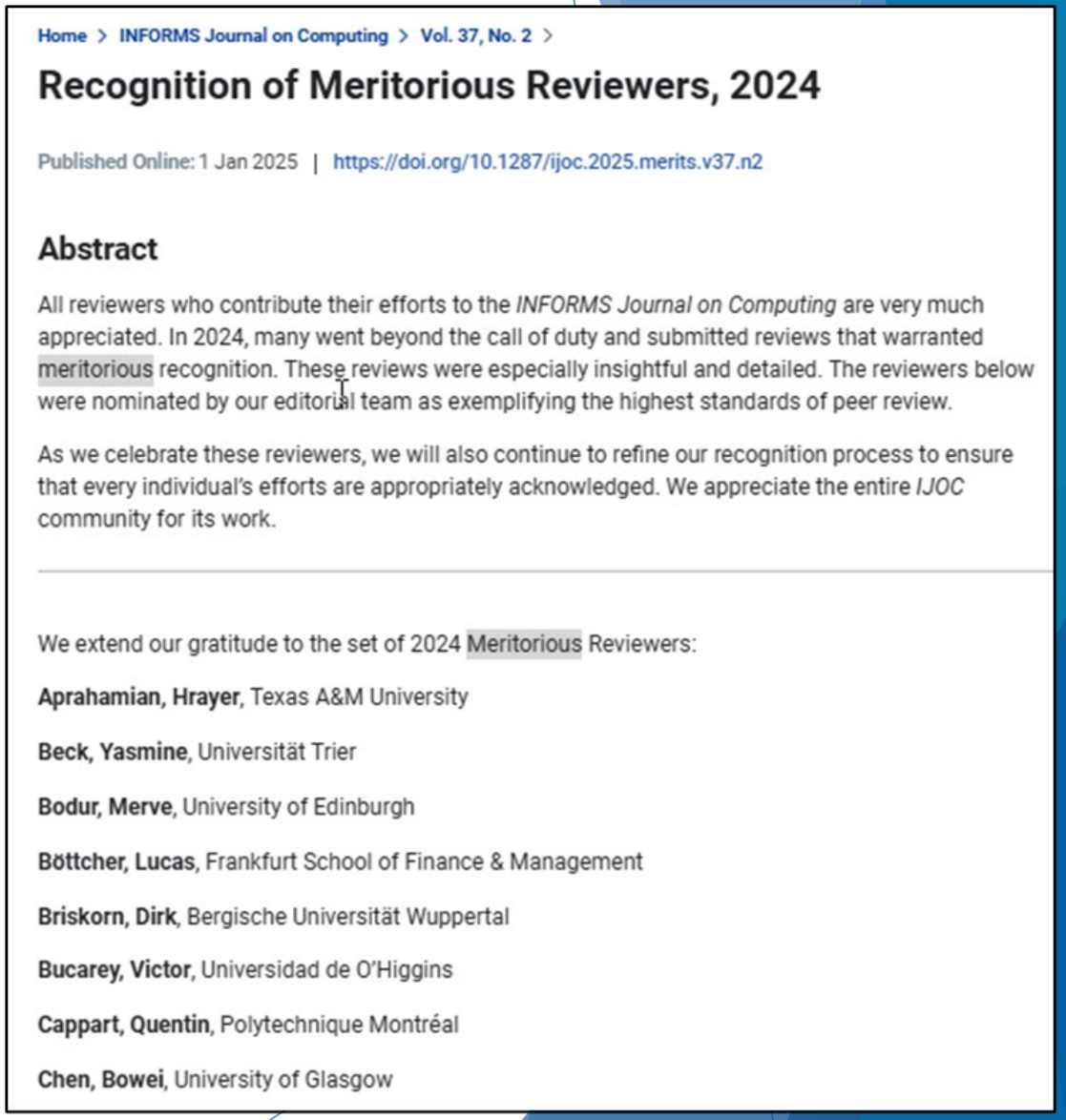



**Reflections on "A Stochastic Radial Basis Function Method for the Global Optimization of Expensive Functions" by Rommel G. Regis and Christine A. Shoemaker (June 2025)**

We greatly appreciate the selection of our paper "A Stochastic Radial Basis Function Method for the Global Optimization of Expensive Functions" (Regis and Shoemaker 2007) for the *INFORMS Journal of Computing* Test of Time Paper Award for 2005–2009. We thank the award committee, the Editor-in-Chief, and the journal for this honor and for their support. This paper was one of the PhD dissertation papers of Rommel Regis completed under the supervision of Prof. Christine Shoemaker, who had both operations research and environmental engineering PhD students, at Cornell University. At the time the project was undertaken, Shoemaker was supported by grants from the Computer and Information Science and Engineering (CISE) and the Engineering Directorates

# Future Transition

- EIC term ends December 31, 2025 - after serving seven years (an extra year was added by INFORMS to equalize stagger of EIC turnovers) and new EIC named (Andrea Lodi), currently IJOC Area Editor
- Technically, ALL editors will turn over at this point in time as well
- The areas are very uneven in terms of volume of submission – this may warrant addressing
- Journal will transition to some form of double-blind reviewing at this date (as mandated for all INFORMS journals)
- Increase page budget and monitor backlog





## Recognition of Meritorious Reviewers, 2024

Published Online: 1 Jan 2025 | https://doi.org/10.1287/ijoc.2025.merits.v37.n2

### Abstract

All reviewers who contribute their efforts to the *INFORMS Journal on Computing* are very much appreciated. In 2024, many went beyond the call of duty and submitted reviews that warranted meritorious recognition. These reviews were especially insightful and detailed. The reviewers below were nominated by our editorial team as exemplifying the highest standards of peer review.

As we celebrate these reviewers, we will also continue to refine our recognition process to ensure that every individual's efforts are appropriately acknowledged. We appreciate the entire *IJOC* community for its work.

We extend our gratitude to the set of 2024 Meritorious Reviewers:

**Aprahamian, Hrayer**, Texas A&M University

**Beck, Yasmine**, Universität Trier

**Bodur, Merve**, University of Edinburgh

**Böttcher, Lucas**, Frankfurt School of Finance & Management

**Briskorn, Dirk**, Bergische Universität Wuppertal

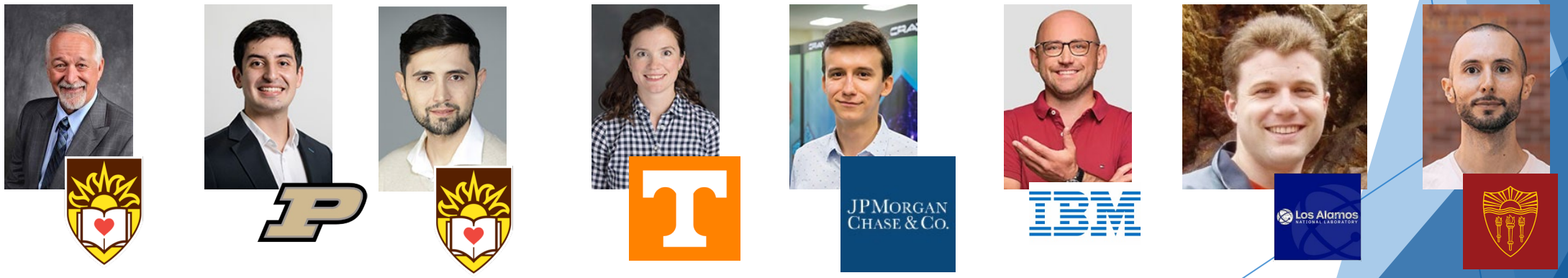
**Bucarey, Victor**, Universidad de O'Higgins

**Cappart, Quentin**, Polytechnique Montréal

**Chen, Bowei**, University of Glasgow

# Quantum Computing & Operations Research (QCOR) Ad Hoc Committee of INFORMS

- **Formed:** October 2024
- **Co-Chairs:** Tamás Terlaky (Lehigh), David Bernal Neira (Purdue)
- **Members:** Mohammadhossein Mohammadisiahroudi (Lehigh U.),
- Rebekah Herrman (UTK), Ruslan Shaydulin (JPMorgan Chase), Stefan Wörner (IBM Zurich), Carleton Coffrin (LANL), Giacomo Naniccin (USC)



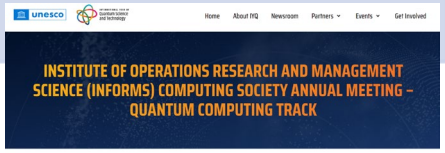
# INFORMS Quantum Computing and Operations Research (QCOR) Ad Hoc Committee

- • Coincides with the 2025 UNESCO International
- Year of Quantum Sciences and Technology **(IYQST)**
- • David Bernal represented Purdue and INFORMS
- at the IYQST launch event
- **• Committee focus: Quantum Computing & OR synergy,**
- **community building, global engagement**

# INFORMS Conference Engagements

## ICS Conference (Toronto Mar. 14-16)

- 2 sessions, each with 3 talks + 1 other talk
  - Bernal as QCOR cluster chair
- 1 tutorial
  - Quantum Computing Inc






The 18th INFORMS Computing Society (ICS) Conference welcomes you to Toronto, Canada. We invite researchers, practitioners, and innovators to come together and share insights at the cutting edge where Operations Research meets Computing.

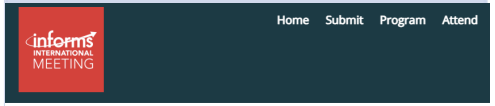
During the annual meeting of the INFORMS Computing Society, we organized the Quantum Computing track for the first time to celebrate the IYQ and the use of quantum computing in the field of operations research and optimization. Join us for an enriching exchange of knowledge, ideas, and experiences. We will host several sessions on quantum computing.

## Business Analytics (Indianapolis Apr. 6-8)

- 2 Exhibitors and tech showcases
  - D-Wave and Quantum Computing Inc
- Panel + state-of-art overview
  - Moderated by Bernal


## International Conference (Singapore Jul. 20-23)

- QCOR keynote by Stefan Woerner
- 4 sessions, each with 3 talks + 2 other talks
- Cluster co-chairs Nannicini & Woerner




Tuesday, July 22

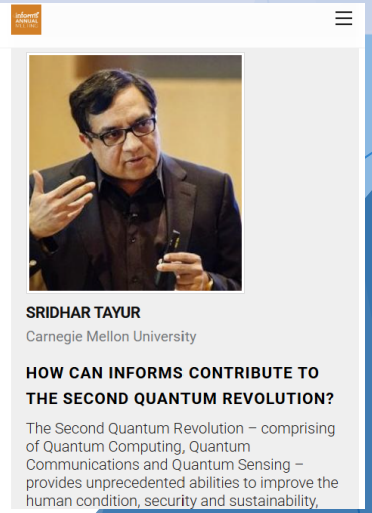
Stefan Wörner
IBM

Quantum Computing and Operations Research: Potential, Challenges, and the Path Forward

Quantum computing is a new computational paradigm with the potential to transform many disciplines, with optimization often being mentioned as a very promising candidate. In this talk, I will discuss the state of quantum computing today and explore both its potential and challenges for optimization. I will highlight opportunities for quantum advantage, as well as how classical optimization can support progress in quantum

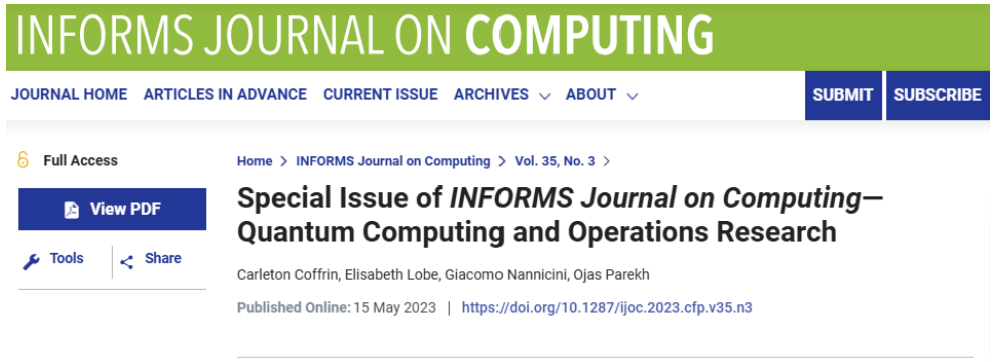
## Annual Meeting (Atlanta Oct. 26-29)

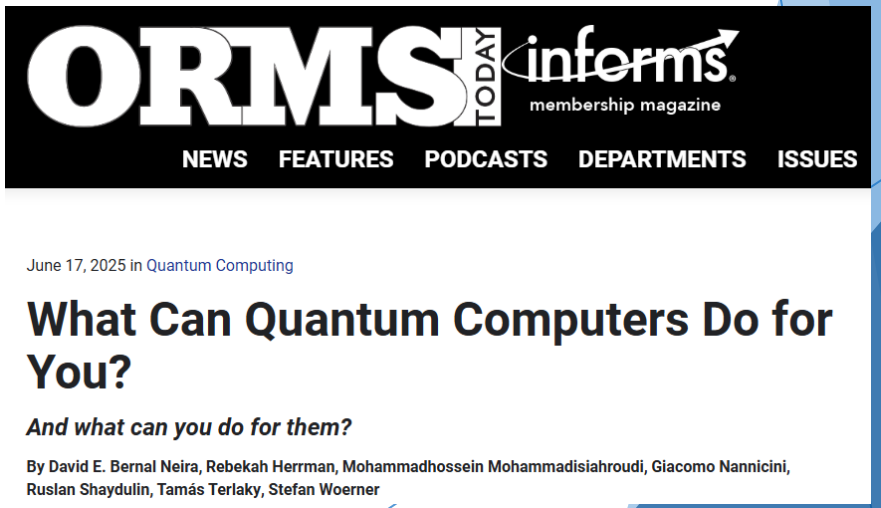
- QCOR keynote by Sridhar Tayur
- 1 TutORial
- Sponsorship/tutorial with D-Wave under discussion
- 2 QCOR sessions + talks



# Publications and Media

- Special Issue in INFORMS Journal on Computing
  - Editors included: Coffrin & Nannicini
- ORMS Today Article: “What Can Quantum Computers Do for You? And what can you do for them?”
  - Focus: overlap between quantum computing and operations research



# Ongoing QCOR Initiatives (2025-2026)

- Explore **Special Issue options** in INFORMS journals (IJOpt, MOR, OR, ...)
- **Subdivision Engagement:** Outreach to INFORMS subdivisions to explore interest and generate support QCOR activities
- **External Partnerships:** Collaboration with SIAM, MOS, ACM, APS, EURO, IFORS, IEEE; co-hosting events (e.g., Purdue Quantum AI Workshop)
- **Community Engagement:**
  - QCOR blog on INFORMS Connect
  - Podcasts
- 2025 Conferences: ICCOPT, ICMOTA, MOPTA, EURO, GOC, IEEE Quantum week
- **2026 Conferences:** IOS, Analytics, Annual, SIOPT, IFORS, ....




# The ICS Prize

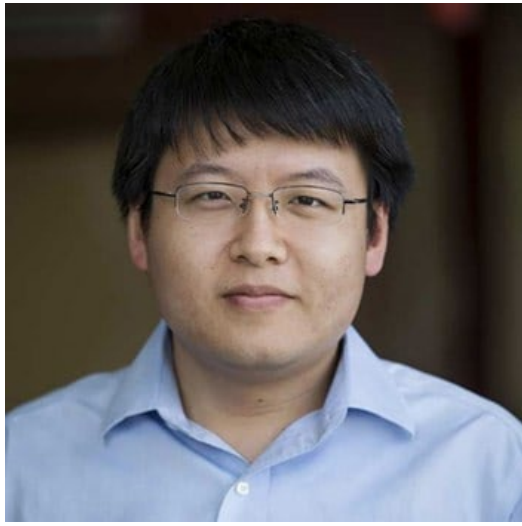
Committee Heroes:

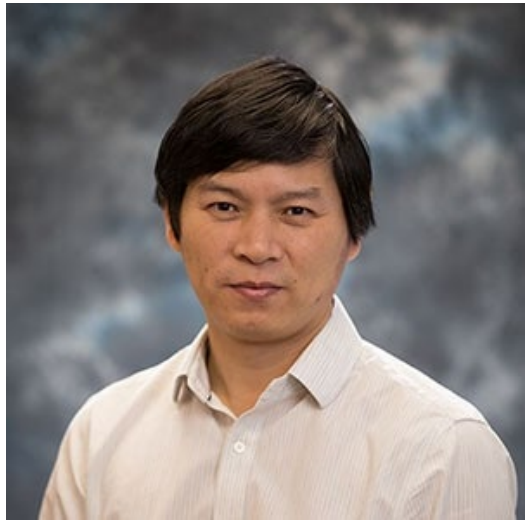
- George Lan (Georgia Tech) – **Chair**
- Güzin Bayraksan (Ohio State University)
- Grani Hanasusanto (University of Illinois Urbana-Champaign)
- Andrew Trapp (Worcester Polytechnic Institute)

# Honorable Mention

Professors **Shabbir Ahmed** (in memoriam), **Yongpei Guan** (University of Florida), **Ruiwei Jiang** (University of Michigan), and **Weijun Xie** (Georgia Tech) are recognized with an Honorable Mention for the 2025 INFORMS Computing Society Prize for their fundamental contributions to the computation of distributionally robust chance-constrained programs (DRCCPs).

Their research established the computational complexity of DRCCPs, developed exact reformulations under phi-divergence and Wasserstein ambiguity sets, and designed both exact and approximation algorithms with provable guarantees. By introducing novel inequalities and cutting-plane methods, they enabled the solution of large-scale, real-world problems in supply chain management, healthcare, and energy systems. Their work has set the standard and shaped the research direction in this important area of risk-averse optimization.






- Ruiwei Jiang, Yongpei Guan, Data-driven chance constrained stochastic program, Math. Program., Ser. A (2016) 158:291–327 DOI 10.1007/s10107-015-0929-7.
- Weijun Xie. Shabbir Ahmed, Ruiwei Jiang, Optimized Bonferroni approximations of distributionally robust joint chance constraints, Mathematical Programming (2022) 191:79–112 https://doi.org/10.1007/s10107-019-01442-8.
- Weijun Xie, On distributionally robust chance constrained programs with Wasserstein distance, Mathematical Programming (2021) 186:115–155 https://doi.org/10.1007/s10107-019-01445-5.
- Weijun Xie, Shabbir Ahmed, Bicriteria Approximation of Chance-Constrained Covering Problems, Operations Research, Vol. 68, No. 2, March–April 2020, pp. 516–533

# Co-Winners

Professors **Alper Atamtürk** (UC Berkeley), **Andrés Gómez** (University of Sourthern California), and **Shaoning Han** (National University of Singapore) are recognized with the 2025 INFORMS Computing Society Prize for their pioneering contributions to modeling and solving mixed-integer quadratic optimization problems.

Through a sequence of influential papers, they developed a powerful convexification toolkit, including submodularity-based inequalities, rank-one relaxations, and 2×2 convexifications, that transformed once intractable mixed-integer quadratic models into scalable algorithms. Their methods elegantly combine theory and computation, enabling advances in machine learning, signal processing, computer vision, and finance.


- Alper Atamtürk, Andrés Gómez, Strong formulations for quadratic optimization with M-matrices and indicator variables, Mathematical Programing, Ser. B (2018) 170:141–176.
- Alper Atamtürk, Andrés Gómez, Submodularity in Conic Quadratic Mixed 0–1 Optimization, Operations Research, Vol. 68, No. 2, March–April 2020, pp. 609–630.
- Alper Atamtürk, Andrés Gómez, Safe Screening Rules for l0-Regression from Perspective Relaxations, Proceedings of the 37th International Conference on Machine Learning, PMLR 119, 2020.
- Alper Atamtürk, Andrés Gómez, Shaoning Han, Sparse and Smooth Signal Estimation: Convexification of l0-Formulations, Journal of Machine Learning Research 22 (2021) 1-43.
- Shaoning Han, Andrés Gómez, Alper Atamtürk, 2 × 2-Convexifications for convex quadratic optimization with indicator variables, Mathematical Programming (2023) 202:95–134.
- Alper Atamtürk, Andrés Gómez, Rank-one Convexification for Sparse Regression, Journal of Machine

# Co-Winners

Professors **Jason Altschuler** (University of Pennsylvania) and **Pablo Parrilo** (MIT) are recognized with the 2025 INFORMS Computing Society Prize for their pioneering work on accelerating gradient descent through stepsize hedging.

Their research introduced the novel concepts of Silver Stepsizes, stepsize hedging, and multi-step descent, demonstrating that acceleration is possible in gradient descent solely through dynamic choice of stepsizes, a breakthrough overturning decades of conventional wisdom. By developing innovative techniques such as recursive gluing, they established improved convergence rates and inspired a new line of research in the design and analysis of optimization algorithms. Their work has already had significant impact across convex optimization and machine learning.


- Jason M. Altschuler and Pablo A. Parrilo. 2025. Acceleration by Stepsize Hedging: Multi-Step Descent and the Silver Stepsize Schedule. J. ACM 72, 2, Article 12 (March 2025), 38 pages. https://doi.org/10.1145/3708502.
- Jason M. Altschuler · Pablo A. Parrilo, Acceleration by stepsize hedging: Silver Stepsize Schedule for smooth convex optimization, Mathematical Programming,

# Conjecture

Let $n$ denote the number of chairs in the award committee, and let $C(n)$ represent the total number of committee members. Then:

$$C(n) \in O(4^n)$$

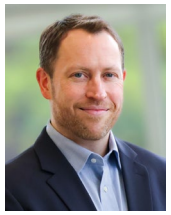
# The ICS Harvey J. Greenberg Research Award

## Committee Heroes


**Chairs**

- Selva Nadarajah, University of Illinois Chicago
- Andre A. Cire, University of Toronto

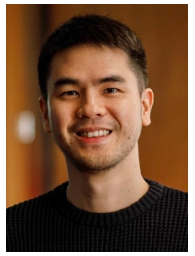
**Steering Committee**


- Dan Adelman, University of Chicago
- David Brown, Duke University
- Ricardo Fukasawa, University of Waterloo
- Simge Küçükyavuz, Northwestern University
- Siqian Shen, University of Michigan
- Golbon Zakeri, University of Massachusetts Amherst



**Review Panel**




- Yi-Chun Akchen, University College London
- Margarida Carvalho, Université de Montréal
- Margarita Paz Castro, PUC Chile
- Levi DeValve, University of Chicago
- Ludwig Dierks, University of Illinois Chicago
- Daniel Jiang, Meta
- Carla Michini,
  University of Wisconsin-Madison
- Raghav Singal, Dartmouth




# Honorable Mention 1

**Soroush Saghafian** (Harvard). “Ambiguous Dynamic Treatment Regimes: A Reinforcement Learning Approach.”

This paper introduces a novel framework for designing treatment guidelines when traditional assumptions in causal inference do not hold. Standard Dynamic Treatment Regimes (DTRs) often fail in real-world applications such as medicine and public policy, particularly when unobserved confounders exist and evolve over time. To address this challenge, the authors propose Ambiguous Dynamic Treatment Regimes (ADTRs), which evaluate treatment policies against a "cloud" of plausible causal models. By connecting ADTRs to Ambiguous Partially Observable Markov Decision Processes (APOMDPs), the paper develops reinforcement learning methods that efficiently learn effective treatment regimes from observational data. Theoretical guarantees, including consistency and asymptotic normality, are established, and the approach is validated both through simulations and a hospital case study on patients who developed New Onset Diabetes After Transplantation (NODAT).

# Honorable Mention 2

**Xiao-Yue Gong** (Carnegie Mellon), **David Simchi-Levi** (MIT). “Bandits atop Reinforcement Learning: Tackling Online Inventory Models with Cyclic Demands.”

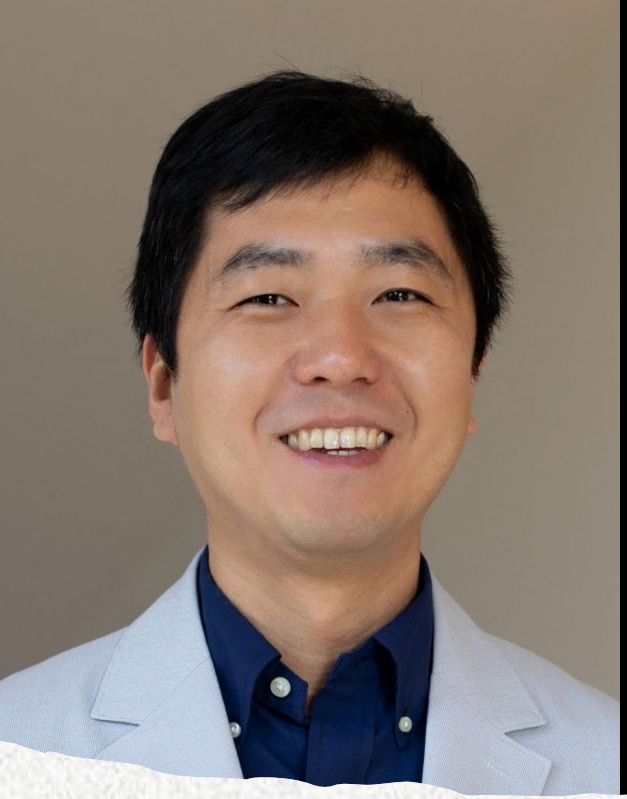
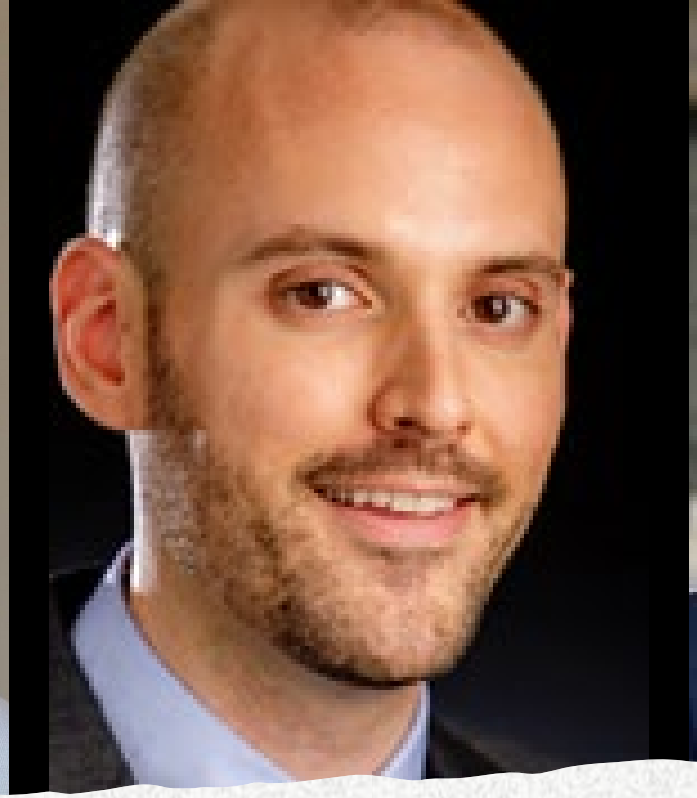
This paper addresses the long-standing gap between inventory theory and practice by studying online inventory models under unknown cyclic demand distributions. The authors design reinforcement learning algorithms that leverage structural properties of inventory problems to achieve near-optimal regret bounds, surpassing existing theoretical results. They analyze both lost-sales and multi-product backlogging models, introducing episodic formulations and extending them to non-discarding models through a novel bandit-based approach, Meta-HQL. Their algorithms match the regret lower bounds they establish, while removing dependence on the size of the state–action space. Empirical studies with real sales data from Rossmann and synthetic benchmarks demonstrate rapid convergence to optimal policies and significant improvements over methods that assume i.i.d. demand.

# Winners

**Braden L. Crimmins** (University of Michigan & Stanford), **J. Alex Halderman** (University of Michigan), **Bradley Sturt** (University of Illinois at Chicago). “Improving the Security of United States Elections with Robust Optimization.”

This paper introduces the first formal approach to designing test decks for logic and accuracy testing (LAT), a procedure that election officials have used for over a century to verify the correctness of voting machines. By employing robust optimization, the authors develop test decks that guarantee detection of any machine misconfiguration that could swap votes across candidates, while minimizing the number of ballots required. Their cutting-plane–based algorithm efficiently solves these optimization problems at scale, and a retrospective study of Michigan's November 2022 general election shows that their method achieves rigorous security guarantees with only 1.2% more ballots than current practice. The approach has since been piloted by the Michigan Bureau of Elections, offering a low-cost and practical solution to strengthen election security and public trust in democratic institutions.

The committee believes this work embodies the spirit of Harvey J. Greenberg's legacy by combining rigorous mathematical techniques (specifically, robust optimization) with a timely and socially important challenge in election security. The paper also demonstrates real-world impact through its pilot program with the Michigan Bureau of Elections.

# The ICS Student Paper A\ward

Committee Heroes:

- Austin Buchanan (Oklahoma State University) – **Chair**
- Ryan Cory-Wright (Imperial College London)
- Yongchun Li (The Chinese University of Hong Kong)
- Young Woong Park (Iowa State University)

# Honorable Mentions

"The Surprising Performance of Random Partial Benders Decomposition“ by **Yupeng Wu** (LBS) and Jean Pauphilet

This paper introduces a simple yet universally applicable variant of Benders decomposition that randomly retains a subset of continuous variables in the master problem. Computational experiments demonstrate that this random retention strategy can perform as effectively as problem-specific approaches, highlighting its potential to advance the current computational practice.

"Accurate Linear Cutting-Plane Relaxations for ACOPF“ by Daniel Bienstock and **Matías Villagra** (Columbia University)

For the ACOPF problem, the authors obtain strong, numerically stable bounds using a cutting plane approach, aided by reformulations and proper cut management. The authors effectively recycle past cuts to warm-start the optimization of related instances, including for the multi-period case.

# Runner Up

"Spatial branch-and-bound for nonconvex separable piecewise linear optimization“ by **Thomas Hübner** (ETH Zürich), Akshay Gupte, and Steffen Rebennack

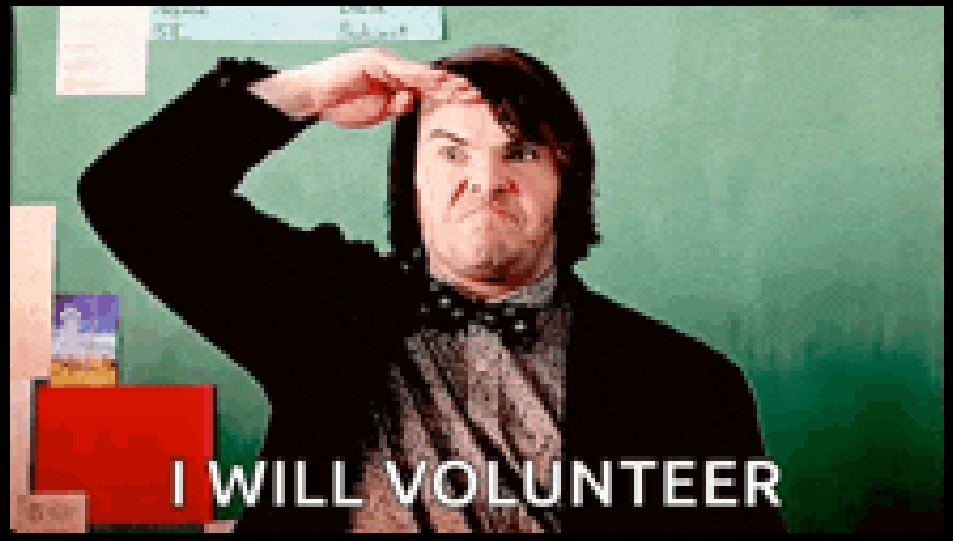
The authors propose a novel spatial branch-and-bound algorithm for solving the separable nonconvex piecewise linear optimization problem based on convex envelope techniques. They demonstrate convergence under mild assumptions and show significant computational improvements over existing mixed-integer linear programming formulations.

# Winner

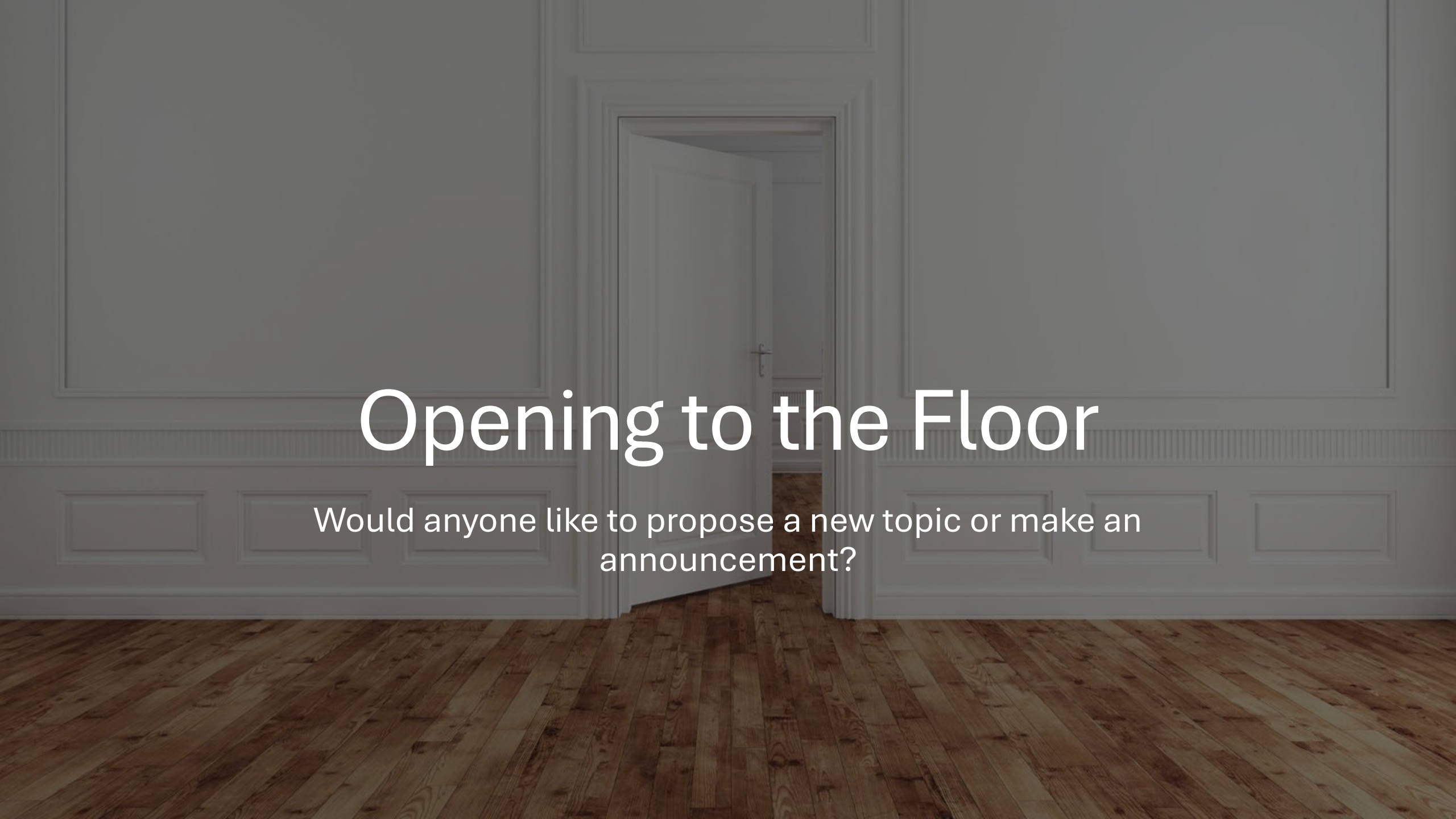
"Robust Paths: Geometry and Computation“ by **Hao Hao** (Carnegie Mellon) and Peter Zhang

The authors study the problem of approximating the set of optimal solutions to a robust optimization problem as the uncertainty set size varies. This is a challenging problem where the optimal radius is usually selected via cross-validation, or by leveraging distributional information to invoke potentially conservative probabilistic guarantees. To overcome this challenge, the authors characterize sets of optimal solutions, or "robust paths", as projections of Bregman curves onto the feasible set. They further demonstrate that these robust paths are well-approximated by the trajectories of deterministic optimization algorithms, potentially allowing ideas from robust optimization to be applied in settings where robust optimization is intractable. The paper is well-written and concludes with several computational studies, making it a deserving recipient of the award.

# ICS 2027




After a successful event in Toronto, we would like to choose the venue of ICS 2027 a year in advance.



# Opening to the Floor

Would anyone like to propose a new topic or make an announcement?