



INSTITUTE FOR OPERATIONS RESEARCH
AND THE MANAGEMENT SCIENCES

I-Sim Newsletter

Officers

President

Raghu Pasupathy
Department of Statistics
Purdue University
West Lafayette, IN 47907
(765) 496-9560
pasupath@purdue.edu

Vice President / President Elect

L. Jeff Hong
Department of Management Science
School of Management
Fudan University
(86) 212-501-1159
hong_liu@fudan.edu.cn

Secretary

Susan R. Hunter
School of Industrial Engineering
Purdue University
West Lafayette, IN 47907
susanhunter@purdue.edu

Treasurer

Jie Xu
Department of Systems Engineering
and Operations Research
George Mason University
Fairfax, VA 22030
jxu13@gmu.edu

Communications Editor

Canan G. Corlu
Metropolitan College
Boston University
Boston, MA 02215
canan@bu.edu

Associate Communications Editor

Qiong Zhang
School of Mathematical
and Statistical Sciences
Clemson University
Clemson, SC 29634
qiongz@clemson.edu

President's Message

Raghu Pasupathy

The I-Sim editorial team and I are happy to bring you the 2019 Spring edition of the I-Sim newsletter. I am also pleased to note that 2018 was yet another excellent year for I-Sim as measured by the strength and diversity of current membership as well as the quality of the 2018 Winter Simulation Conference and the simulation track of the 2018 INFORMS Annual Meeting.

The three flagship awards of I-Sim — the Lifetime Professional Achievement Award (LPAA), the Distinguished Service Award (DSA), and the Outstanding Simulation Publication Award (OSPA) — were all awarded this year. I want to give a special word of thanks to the various award committees for their hard work in terms of seeking nominations and navigating challenging issues as they deliberated the nominees for these awards. This newsletter includes details on the flagship award recipients as well as the three recipients of the diversity award given out by the Committee on Underrepresented Minorities and Women. The newsletter also includes a call for nominations for these awards for the year 2019.

There are a number of important initiatives quietly underway within I-Sim. The first of these is the efforts, spearheaded by David Eckman and Shane Henderson at Cornell University, substantially updates the existing library of simulation optimiza-

The *INFORMS Simulation Society Newsletter* is published in the spring and fall each year by the INFORMS Simulation Society (I-Sim), <http://connect.informs.org/simulation/>. Membership in I-Sim is independent of INFORMS membership. To join, visit <https://www.informs.org/About-INFORMS/Member-Benefits/Join-INFORMS-and-or-INFORMS-Communities>, or contact the I-Sim Secretary. © 2019 The Institute for Operations Research and the Management Sciences. All rights reserved.

Contents

Society Officers	1
Officers' Reports	
• President's Message	1
• Treasurer's Report	3
• Secretary's Corner	3
Committee Reports	
• Ph.D. Colloquium	4
• Simulation Archive	4
• Subdivision Council	6
Editors' Reports	
• <i>Journal of Simulation</i>	6
• <i>Operations Research</i>	7
• <i>Stochastic Systems</i>	7
Conference Announcements	
• INFORMS International	8
• ICML	8
• COLT	8
• INFORMS-APS	8
• MCM	9
• WISS	9
• 2019 INFORMS Annual	10
• 2019 WSC	10
2018 Award Recipients	
• LPAA: James O. Henriksen ..	11
• DSA: Michael Fu	13
• OSPA: Boris N. Oreskin, Nazim Régnard, Pierre L'Ecuyer ..	15
• WSC PhD Colloq. Best Paper: David Eckman	16
• WSC Diversity Award: Maria Julia Balas, Ana Ionesi, Mengyi Zhang	16
Calls for Proposals, Nominations	
• LPAA	16
• DSA	17
• OSPA	18
Business Meeting Minutes	
• WSC	19
I-Sim Ballots	
• I-Sim Elections Ballot	23
• Candidate Biographies	24
Event Calendar	26

President's Message, Continued

Raghu Pasupathy

tion problems and solvers (www.simopt.org). The objective of this effort is clear — to further foster a systematic and disciplined environment for algorithm development, assessment, and testing, toward solving large scale and diverse simulation optimization problems. David Eckman will be presenting details of this update in the 2019 Winter Simulation Conference. The second notable initiative is the effort to create online short teaching modules on various topics of simulation. A few selected individuals are already involved in creating the first few such modules as a pilot effort. You will be hearing more on this initiative shortly. The third initiative is broader and is aimed at clarifying how a lot of the research activity that has routinely happened in the Analysis Methodology and Simulation Optimization tracks applies to the machine learning and big data context. Specifics on this initiative are still being discussed and will become clear over the upcoming year.

A final important point is a reminder to vote for two vacant positions in the I-Sim council. I-Sim's council members perform the important task of deliberating and guiding the society on various issues pertaining to the functioning and the future of the society. The I-Sim Elections Ballot (for two council members) appears at the end of this newsletter.

□

Treasurer's Report

Jie Xu

Beginning Balance (1/1/2018)	\$102,215	
Total Revenue	\$14,433	
• Dues		\$4,835
• Other		\$0
• Interest		\$1,564
• WSC Distribution		\$8,034
Total Expenses	\$10,619	
• National meeting expense (INFORMS 2018)		\$2,847
• Local meeting expense (WSC 2018)		\$6,700
• Membership Expense (2018 Subdivisions Council Retreat)		\$410
• Award Expense (2017 awards)		\$550
• Bank fees		\$112
• Misc/General Expense		\$0
Net Gain / Loss	\$2,488	
Ending Balance* (12/31/2018)	\$106,029	

* The I-Sim account includes \$20,750 that belongs to the liability account shared by all four WSC sponsors (see Fall 2012 newsletter). WSC 2017 had a loss of \$226. WSC 2018 had a surplus of \$8,260. The above numbers are based on the December 2018 bank statement before INFORMS finishes its internal auditing process and is subject to change.

□

Secretary's Corner

Susan R. Hunter

As of March 8, 2019, we have 1,199 members. This number is another increase from past years (915 members in March 2018, 647 members in 2017, 618 members in 2016). Thank you for your support!

Our long-standing membership includes 10 people who have been members since 1979 (40 years or more), 25 who have been members since 1989 (30 years or more), 60 who have been members since 1999 (20 years or more), and 146 who have been members since 2009 (10 years or more). Thank you for your long-standing support.

We have 62 members who joined on or after January 1, 2019. Welcome, new members!

We have at least 253 members with addresses outside the United States. Among these members, the most well-represented countries are Canada (44 members), China (27 members), India (23 members), the United Kingdom (21 members), South Korea (15 members), Netherlands (14 members), Chile (13 members), and Germany (12

members).

Please remember to renew your I-Sim membership when you renew your INFORMS membership this year. You can renew online at <https://www.informs.org>. If you are not currently a member and want to join I-Sim, please visit

<https://www.informs.org/About-INFORMS/Member-Benefits/Join-INFORMS-and-or-INFORMS-Communities>.

Members receive discounts on conferences sponsored by the Simulation Society, including the Winter Simulation Conference. Membership is also a great way to participate in and support the simulation community. □

COMMITTEE REPORTS

WSC Ph.D. Colloquium

WeiWei Chen, Chair

During the 2019 Winter Simulation Conference, ACM-SIGSIM and INFORMS-Sim will once again sponsor the Ph.D. Colloquium for students who are within one year of their graduation (planning to graduate by Dec. 2020). Students close to graduation will be given an opportunity to showcase their work during a short presentation session (apart from the regular tracks). All Colloquium students will then participate in the Colloquium poster session. Presenting your Ph.D. efforts to your peers and supporting society members will give you valuable feedback and support for your research and introduce you to a network that can help your career once you graduate. The Ph.D. Colloquium will be conducted on Sunday, December 8, 2019, starting with lunch. Additional information about the 2019 Ph.D. Colloquium will be updated on the Winter Simulation Conference website: <http://meetings2.informs.org/wordpress/wsc2019/>. □

Report on the Simulation Archive

Simulation Archive Advisory Committee: James R. Wilson (chair), Russell Barton, Richard E. Nance, Robert G. Sargent

This is a summary of the major developments since August 1, 2018, in the Computer Simulation Archive <https://d.lib.ncsu.edu/computer-simulation/> housed in the Special Collections Research Center of the North Carolina State University (NCSU) Libraries:

- We updated the Letter of Understanding between the NCSU Libraries and the Computer Simulation Archive Advisory Committee (CSAAC) to reflect the dramatic growth of the Archive and its endowment since the original Letter of Understanding was approved on June 24, 2008.
- We approved a plan titled Transition of the Computer Simulation Advisory Committee to formalize the procedures governing the recruitment and rotation of new members of the CSAAC. Since this plan went into effect,
 - Russell R. Barton (Penn State) joined the CSAAC;

- Gwynn Thayer, Acting Department Head of the Special Collections Research Center in the NCSU Libraries, will be the representative of the NCSU Libraries to the CSAAC; and
- James R. Wilson (NCSU) will serve as the Chair of the CSAAC from July 1, 2018, to June 30, 2020.
- We completed the acquisition and cataloging of the Brian W. Hollocks Collection 1961–1982 <https://www.lib.ncsu.edu/findingaids/mc00653/>; see also <https://www.lib.ncsu.edu/news/main-news/look-dawn-computer-age>.
- We have acquired and are currently cataloging an initial installment of the James O. Henriksen Collection, which encompasses materials documenting Jim's work since 1967.
- We successfully nominated Dick Nance (Virginia Tech) to represent the Archive and ACM SIGSIM as a participant in the ACM SIG Heritage Workshop to be held May 20–21, 2019, at the Charles Babbage Institute housed at the University of Minnesota (Minneapolis).
- We have recently purchased two classic works by Charles Babbage; see <https://catalog.lib.ncsu.edu/catalog/NCSU4517715> and <https://catalog.lib.ncsu.edu/catalog/NCSU4557819>.
- We are starting to digitize our simulation collections using some of the income from the Archive's endowment.

As of December 31, 2018, the Archive's endowment totaled \$110,782. Interest from the endowment supports our ongoing effort to produce oral history interviews with leaders in the field of computer simulation and to acquire and catalog collections of their materials documenting the evolution of the field since its inception in the 1940s. Since January 1, 2019, we received a donation to the endowment of \$5,000 from ACM SIGSIM and a donation of \$2,000 in honor of Julian Reitman from Jim Wilson.

Bob Sargent (Syracuse University) will be leaving the CSAAC on June 30, 2019. Bob is the founder of the Archive, and over the past 21 years, he has been the driving force behind its advancement. Bob conceived the idea of creating the Computer Simulation Archive in 1998, and he made possible its establishment in the Special Collections Research Center of the NCSU Libraries. In 2003 he donated the Sargent Collection <https://www.lib.ncsu.edu/findingaids/mc00343/> to the Archive, and in 2007 he established the Sargent Endowment to support that collection. In 2007 Bob also established the Simulation Archive Endowment. Bob proposed the creation of the CSAAC in 2007, and he served as its initial chair with members Dick Nance and Jim Wilson. Bob also initiated the Archive's project of creating oral history videos of the pioneers in the simulation field, and this development led to an NSF grant to support the oral-history project in 2011. Bob's tireless work on the advancement of the Archive has led to major contributions of historical materials and financial support to the Archive and its Endowment by individuals, professional societies, and academic institutions over the past two decades. Bob Sargent's effort to create and advance the Computer Simulation Archive is itself a major milestone in the history and maturation of the simulation field. □

Report on the Subdivision Council

Theresa Roeder, I-Sim Representative to the Subdivision Council

This year, the Subdivisions Council has undertaken four initiatives:

- Sections/societies/fora/chapter data needs: Determine what data is available, problems we want/need data to solve, and what data to collect and how best to collect.
- Effective subdivision practices: Identify and document effective practices within the INFORMS Subdivisions (i.e., societies, sections, chapters, and fora) so we can disseminate them for other subdivision leaders to consider, adopt, and/or modify for their own use.
- Innovative funding: Identify key types of subdivision strategic initiatives that need funding, identify a strategy for raising money for these initiatives, and identify a process and criteria for awarding funds.
- AI data/code: Investigate, understand better what can we do.

If anyone has any thoughts, ideas, or questions about these initiatives, please contact Theresa Roeder at tmroeder@sfsu.edu. □

EDITORS' REPORTS

Report on the *Journal of Simulation*

Christine Currie, John Fowler, and Loo Hay Lee, Editors

Impact factor for 2017: 1.218. As we have just moved to a new editorial system, our data on the progression of papers is split between two systems, making it hard to come up with accurate numbers but we estimate that the acceptance rate is about 20% and time between submission and the final decision is on average just less than 100 days.

Journal of Simulation (JOS) aims to publish both articles and technical notes from researchers and practitioners active in the field of simulation. In JOS, the field of simulation includes the techniques, tools, methods and technologies of the application and the use of discrete-event simulation, agent-based modelling and system dynamics. JOS encourages theoretical papers that span the breadth of the simulation process, including both modelling and analysis methodologies, as well as practical papers from a wide range of simulation applications in domains will examine a wide range of domains including for example, manufacturing, service, defence, health care and general commerce. JOS will particularly seek topics that are not “mainstream” in nature but interesting and evocative to the simulation community as outlined above. □

Report on Operations Research

L. Jeff Hong, Operations Research Simulation Area Editor

Activity in the Simulation Area of Operations Research (Nov 1, 2018 to May 31, 2019)

For the period specified, there were 13 new submissions and 3 resubmissions. There were 5 rejections, 5 revise-and-resubmit decisions and 1 acceptances. Of the editorial decisions made in this period, 4 were late (between 4 and 6 months from date of submission) and 2 were very late (6 months or more). I would like to thank the Associate Editor team, Russell Barton, Peter Frazier, Jiaqiao Hu, Seong-Hee Kim, Henry Lam, Ilya Ryzhov, and Enlu Zhou, for their wonderful service to the journal.

The editorial statement of the simulation area may be found at

<https://pubsonline.informs.org/page/opre/editorial-statement/area-editors-statements>.

In addition to the traditional areas of simulation, we welcome contributions that develop the interface of simulation with other methodological areas (for example, large-scale computing, machine learning and data analytics) or application areas (such as healthcare, financial engineering, sharing economy, environment and energy). In general, papers should be of interest to a broad O.R. audience, and not just to the simulation community, although we certainly welcome papers that represent major theoretical progress. Please submit papers electronically via the Manuscript Central O.R. Web site (<http://mc.manuscriptcentral.com/opre>). □

Report on Stochastic Systems

Shane G. Henderson, Editor in Chief

Stochastic Systems is the flagship journal of the INFORMS Applied Probability Society. It seeks to publish high-quality papers that substantively contribute to the modeling, analysis, and control of stochastic systems. A paper's contribution may lie in the formulation of new mathematical models, in the development of new mathematical or computational methods, in the innovative application of existing methods, or in the opening of new application domains. The editorial board includes simulation researchers Jose Blanchet, Paul Glasserman, Peter Glynn, and Sandeep Juneja. For the full editorial board see <https://pubsonline.informs.org/page/stsy/editorial-board>.

The journal homepage is <http://pubsonline.informs.org/journal/stsy>.

Stochastic Systems is an open access journal. There are no submission fees or page charges. We aim to return reports to authors within 3 months of submission. Our average time to decision is 86 days and 90% of decisions are made within 150 days. Not bad, but still not where I'd like to be. Please submit papers at <http://mc.manuscriptcentral.com/ssy/>. □

CONFERENCE ANNOUNCEMENTS

INFORMS International Conference

June 9–12, 2019, Cancun, Mexico

L. Jeff Hong (source: <http://meetings2.informs.org/wordpress/2019international/>)



“We are very pleased to invite members of INFORMS, Association of Latin-Iberoamerican Operational Research Societies (ALIO), and the worldwide OR/MS and Analytics community to join us in Cancun, Mexico in June 2019 for the INFORMS–ALIO International Meeting. This joint conference is sponsored by both INFORMS and the Mexican Society of Operations Research (SMIO).”

□

36th International Conference on Machine Learning (ICML)

June 10–15, 2019, Long Beach, CA

(source: <https://icml.cc/Conferences/2019>)

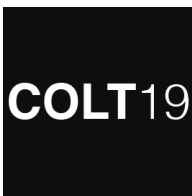
“The 36th International Conference on Machine Learning (ICML 2019) will be held in Long Beach, CA, USA from June 10th to June 15th, 2019. The conference will consist of one day of tutorials (June 10), followed by three days of main conference sessions (June 11–13), followed by two days of workshops (June 14–15). We invite submissions of papers on all topics related to machine learning for the conference proceedings, and proposals for tutorials and workshops.”

□

Conference on Learning Theory (COLT)

July 25–28, 2019, Phoenix, AZ

(source: <http://learningtheory.org/colt2019/>)



“The 32nd Annual Conference on Learning Theory (COLT 2019) will take place in Phoenix, Arizona, June 25–28, 2019, as part of the ACM Federated Computing Research Conference, which also includes EC and STOC. We invite submissions of papers addressing theoretical aspects of machine learning and related topics. We strongly support a broad definition of learning theory...”

□

20th INFORMS Applied Probability Conference (INFORMS-APS)

July 3–5, 2019, Brisbane, Australia

(source: <http://informs-aps.smp.uq.edu.au>)



“INFORMS Applied Probability Society Conference will feature research interest in random matrices, random graphs, stochastic networks, combinatorial optimization and stochastic geometry, design and performance of service systems, and the design and analysis of algorithms, and study of large networks such as online social networks and the World Wide Web, randomized algorithms, and random graphs.”

The Conference will be held at the Brisbane Convention Centre. A number of related events are being held before and after the INFORMS-APS conference: 1) Workshop on Queues, Modelling, and Markov Chains; 2) Applied2 Probability; 3) 12th International Conference on Monte Carlo Methods and Applications (MCM 2019).

□

12th International Conference on Monte Carlo Methods and Applications

July 8–12, 2019, Sydney, Australia

(source: <http://www.mcm2019.unsw.edu.au>)



“The biennial International Conference on Monte Carlo Methods and Application (MCM) (formerly IMACS Seminar on Monte Carlo Methods) is one of the most prominent conference series devoted to re-

search on the mathematical aspects of stochastic simulation and Monte Carlo methods, including their effective application in different areas, such as finance, statistics, machine learning, computer graphics, computational physics, biology, chemistry, and scientific computing in general.”

The conference will be held at UTS Business School (Building 8).

□

10th International Workshop in Simulation and Statistics

September 2–6, 2019, Salzburg, Austria

(source: <http://datascience.sbg.ac.at/SimStatSalzburg2019/>)



“The Faculty of Natural Sciences of the Universität Salzburg and the Department of Statistics of the Alpen Adria Universität Klagenfurt will organize the conference in collaboration with the ‘Methodenzentrum Versuchsplanung’ of the University of Natural Resources and Life Sciences, Vienna (BOKU), the De-

partment of Statistical Modelling of Saint Petersburg State University and INFORMS Simulation Society (USA). This international conference is devoted to statistical techniques in stochastic simulation, data collection and design and analysis of scientific experiments and studies representing broad areas of interest.”

The working language of the conference is English, and the location is Faculty of Natural Sciences Hellbrunner Strasse 34.



2019 INFORMS Annual Meeting

October 20–23, 2019, Seattle, WA

(source: <http://meetings2.informs.org/wordpress/seattle2019/>)



“The 2019 INFORMS Annual Meeting is a unique opportunity to connect and network with the more than 6,000 INFORMS members, students, prospective employers and employees, and academic and industry experts who compose the INFORMS community.”

The 2019 INFORMS Annual Meeting will be held at the Washington State Convention Center and Sheraton Grand Seattle Hotel. The deadline for abstract submission is May 15, 2019 and deadline for poster submission is August 1, 2019. All speakers must be registered by September 10, 2019.



2019 Winter Simulation Conference

December 8–11, 2019, National Harbor, Maryland

(source: <http://meetings2.informs.org/wordpress/wsc2019/>)



“The 2019 conference seeks to highlight the latest simulation technologies for more accurately anticipating risks and for making more robust decisions in the face of uncertainty, ambiguity, and variability. These include methods for robust and accurate simulation modeling, analysis, and optimization. We also invite papers describing applications of simulation to risk management in a broad variety of domains, including healthcare, disaster response, power grids, construction, transportation, finance, cybersecurity, and more.”

WSC 2019 will take place at the Gaylord National Resort & Convention Center. This year, the submission deadlines are: 1) April 5, 2019 for contributed paper, 2) August 2, 2019 for poster session or Ph.D. colloquium, and 3) August 2, 2019 for case study.



2018 AWARD RECIPIENTS

James O. Henriksen Receives the 2018 Lifetime Professional Achievement Award

Russell Cheng (Chair), Marvin Nakayama, and Lee Schruben

The Lifetime Professional Achievement Award is the highest honor given by the Institute for Operations Research and the Management Sciences' (INFORMS) Simulation Society. The purpose of the award is to recognize major contributions to the field of simulation that are sustained over most of a professional career, with the critical consideration being the total impact of those contributions on computer simulation.



James O. Henriksen and Robert G. Sargent

The selection committee, consisting of Russell Cheng (Chair), Marvin Nakayama, and Lee Schruben, is pleased to select James O. Henriksen for the INFORMS Simulation Society's 2018 Lifetime Professional Achievement Award. Jim is the founder and CEO of Wolverine Software, which was established in 1976 and is devoted to providing simulation software to the simulation community.

To be chosen for this award, an individual's contributions may be in one or more of the following areas: development of software or hardware, contributions to research, service to the profession, contributions to practice, dissemination of knowledge, and advancement of the status or visibility of the field. Jim has made significant and sustained contributions in all of these areas. We next summarize his contributions to the six areas.

Area 1. Development of Software or Hardware. Jim has made numerous contributions to simulation software. He made corrections to IBM's GPSS software while employed by the University of Michigan Computer Center (part-time 1967-1968 and full-time 1970-1974). Next, Jim was the project manager for the development of CACI's Univac 1108 version of Simscript II.5 (1974-1975). Jim then established Wolverine Software (1976) for developing simulation software. He first developed GPSS/H for IBM mainframe computers. The first version released in 1977 had numerous improvements over the other commercial versions of GPSS then available including being compiled instead of interpreted, having much faster run-times for executing models, and having additional modeling features. GPSS/H soon dominated the market for GPSS. Later versions of GPSS/H were developed for various types of computers. GPSS/H continues to be used as a simulation language world-wide. Jim next developed Proof Animation, which was introduced in 1989 as one of the first 2-dimensional simulation animation software products. Later versions were developed including 3-dimensional animations. Jim introduced in 1995 the Simulation Language eXtensible, SLX, as a multiple-layered software simulation product.

Area 2. Contributions to Research. Jim's research has been primarily directed at developing practical ways to make simulations run faster, to model, and to develop models faster. One of Jim's major research areas has been and continues to be event-lists algorithms. He has developed perhaps the best algorithms for executing discrete-event simulations based on his research into the statistical underpinnings of event-list behavior. Jim has investigated the "best ways" to model specific systems, such as conveyor systems, using different world views. He has also researched and developed tools to model systems faster, such as debuggers and animation; and furthermore developed what a simulation environment should contain. Additionally, he has developed a new simulation language SLX based on his knowledge gained through years of research, simulation software development, and simulation model development.

Area 3. Service to the Profession. Jim has performed considerable professional service, such as refereeing numerous papers for a variety of journals and conferences. But foremost has been his notable service to the Winter Simulation Conference (WSC). He served as Business Chair of the 1981 WSC, the General Chair of the 1986 WSC, a keynote speaker at the Twenty-Fifth anniversary of WSC (1992), a Titan speaker at the 2006 WSC, one of the panelists to select the Landmark Papers for the Fortieth WSC (2007), and the ACM/SIGSIM representative to the WSC Board of Directors from 1987-1990. Also, Jim was the initiator of having exhibits at WSC, which started in 1984, and which has become an integral part of WSC ever since.

Area 4. Contributions to Practice. Jim through Wolverine Software has provided the simulation community commercial simulation products (GPSS/H, Proof Animation, and SLX) that push the "state-of-the-art" and are "efficient" in a variety of ways including computationally and ease of use. He has made some fifty presentations at WSC that include how to model, how to use specific simulation software, and how specific simulations work. Jim has advised many users of his company's software how to model "difficult situations" and how to model to avoid excessively long model execution times. Also, while Jim was in the U.S. Army, he did simulations regarding the Safeguard Antiballistic Missile System.

Area 5. Dissemination of Knowledge. Jim taught simulation along with other computer science courses as a Teaching Assistant at the University of Michigan and as an Adjunct Professor at Virginia Tech Northern Virginia Center. He has published papers in Operations Research, Journal of Simulation, and a variety of conference proceedings including several WSC Proceedings. Jim has made numerous presentations to a variety of audiences and has taught classes regarding his company's simulation products.

Area 6. Advancement of the Status or Visibility of the Field. Jim has promoted simulation as a problem-solving method to many companies and government organizations. His development of GPSS/H that executed much faster than other GPSS Languages and had additional modeling features helped remove the image that simulation had for many years as being a "method of last resort." Jim was selected to record two videos for the Computer Simulation Archive, a widely viewed collection covering the history of the field.

Support Letters. The support letters for Jim's nomination emphasized the impor-

tance of his numerous contributions to the simulation community. Perhaps of equal significance are the comments made about how Jim is an extraordinary person.

- “most noteworthy to me, is his tireless and truly selfless service to the simulation community”;
- “as a non-academic, Jim was not required or pressured to teach or be involved with students, but he did so anyway”;
- “he is one of the giants in the field”; and
- “he is one of the finest individuals whom I have ever met.”

In conclusion, the selection committee is honored to have been able to select James O. Henriksen as the 2018 Lifetime Professional Achievement Award recipient.

□

Michael Fu Receives the 2018 Distinguished Service Award

Doug Morrice (Chair), Enver Yücesan, and John Fowler

The INFORMS Simulation Society (I-Sim) presented its 2018 Distinguished Service Award to Dr. Michael Fu, Smith Chair of Management Science at the Decision, Operations, and Information Technologies Department of the Robert H. Smith of Business, University of Maryland at College Park, for his outstanding contributions in service over the past twenty-five years to I-Sim, the Winter Simulation Conference (WSC), and the broader simulation community. A presentation of the award took place on December 10, 2018, during the opening session of the 2018 WSC in Gothenburg, Sweden, followed by an extended re-presentation of the award on December 11, 2018, during the I-Sim business meeting.



Raghu Pasupathy, Michael Fu, and Björn Johansson

I-Sim established its Distinguished Service Award (DSA) in 1986 to recognize each year at most one individual who has provided “long-standing, exceptional service to the simulation community (<https://www.informs.org/Recognizing-Excellence/Community-Prizes/Simulation-Society/Distinguished-Service-Award>) acquitted with distinction.” In 2018, the award selection committee consisted of Enver Yücesan (INSEAD), Douglas Morrice (University of Texas-Austin), and John Fowler (Arizona State University), with Enver Yücesan completing his final year of service on the committee and Douglas Morrice serving as chair.

For more than thirty years, Dr. Fu has conducted research in simulation and applied probability with application to problems found in manufacturing, supply chain management, telecommunications, and financial engineering. From his earliest work on perturbation analysis that appeared in the *Proceedings of the 1988 Winter*

Simulation Conference, Dr. Fu has been instrumental in developing Simulation Optimization into a distinct and important research area. Besides his own numerous research contributions, he has done much to create opportunities for scores of other researchers in this burgeoning topic. Since 1994, he has offered several tutorials on Simulation Optimization at WSC and other conferences. In a WSC 2000 panel, he suggested the construction of a Simulation Optimization testbed that other leading researchers eventually developed. As the 2011 WSC Program Chair, Dr. Fu introduced the initial Simulation Optimization track, and it has remained part of the program ever since. In 2010-2011, he received NSF funding to establish the first Workshop on Simulation Optimization that brought together researchers from the simulation, applied probability, and optimization research communities. Lastly, he served as co-coordinator of the WSC 2014 Simulation Optimization track illustrating his sustained commitment to fostering research on this topic at WSC.

The depth and breadth of Dr. Fu's service contributions are truly remarkable. Besides his aforementioned service to WSC presenting tutorials, participating on panels (multiple times), coordinating tracks, and serving as the WSC 2011 Program Chair, Dr. Fu was a member of the I-Sim Outstanding Publication Award committee from 1999-2002, serving as committee chair in 2001. More recently, he co-authored the article "The Winter Simulation Conference Turns 50" in *OR/MS Today* with Dr. Thomas J. Schriber. One of Dr. Fu's nominators states that this article was "not only a great service to the simulation community, but also a great outreach piece to the broader OR/MS world."

Dr. Fu has had a remarkably distinguished career of service on the editorial boards of several top journals in the field including *Management Science*, *Operations Research*, *Mathematics of Operations Research*, *INFORMS Journal on Computing*, *IIE Transactions*, and *Production Operations Management*. Of particular note, he served as Stochastic Models and Simulation Department Editor for *Management Science* from 2006-2008 (plus an additional eight years as Associate Editor) and Simulation Area Editor for *Operations Research* from 2000-2005 (plus two years as Associate Editor). Dr. Fu has also influenced the field by his service as National Science Foundation Operations Research Program Director (4 years), Treasurer on the INFORMS Board of Directors (2 years), member of the INFORMS *OR/MS Today* and *Analytics magazine* committee (4 years), and member and chair of the INFORMS Lancaster Prize Committee (2 years). All of these service positions not only positively impact the simulation community, but also the larger OR/MS community as well.

One of Dr. Fu's nominators sums up a sentiment voiced by all his nominators and the DSA committee members: "Michael's efforts have always been in the best interest of the simulation community and its members. The character traits that permeate his personal life are the very same ones that have made him a valuable and dedicated contributor to I-SIM. There are people who are more visible than Michael in their activities, but few have done it with the dedication that he exudes. Simply put, he is a superb choice for the I-SIM Distinguished Service Award." □

Boris N. Oreshkin, Nazim Régnard, and Pierre L'Ecuyer win the 2018 Outstanding Simulation Publication Award

Christos Alexopoulos (Chair), Barry L. Nelson, and Christine Currie



Raghu Pasupathy, Pierre L'Ecuyer, and Björn Johansson

The selection committee enthusiastically agrees and is pleased to give the INFORMS Simulation Society's Outstanding Publication Award to Boris N. Oreshkin, Nazim Régnard, and Pierre L'Ecuyer for their paper:

Rate-Based Daily Arrival Process Models with Application to Call Centers, *Operations Research* 64 (2) 510–527, 2016.

– The authors explore an important problem in the area of input modeling. In particular, the authors propose, develop and compare new stochastic models for

the daily arrival rate in a call center.

– Current models often presume certain independence features across time periods, but the authors argue that this may not be sufficiently realistic for assessing the performance or for making system design decisions. The authors propose and analyze models which account for dependence across these time periods, and develop specialized techniques for doing so.

– Along the way, they explore the relationship between arrival rates, for which maximum likelihood techniques may be challenging due to the lack of direct observability of the rates, and the counts for arrivals in the periods. Counts have the advantage of being observable.

– Although the main focus of the article is on the arrival processes for call centers, which comprise a significant sector of the economy, its contributions are also relevant for models of other important applications, such as arrival processes for retail, health services, restaurant services, and service management more generally.

– The authors have done a fine job of linking together theory for input process modeling, probabilistic tools such as normal copulas to explore correlations, and integration with both call center data and data from a major utility company to demonstrate the characteristics of their proposal.

□

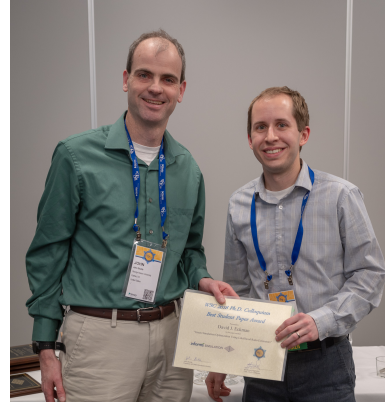
David J. Eckman Receives the 2018 WSC Ph.D. Colloquium I-Sim Best MS/OR-Focused Student Paper Award

Canan G. Corlu, Communications Editor

The I-Sim best MS/OR-focused student paper is:

“Green Simulation Optimization Using Likelihood Ratio Estimators” by David J. Eckman, Cornell University.

The winner is awarded \$200 sponsored by I-Sim and ACM SIGSIM.



John Shortle and David Eckman

Maria Julia Blas, Ana Ionesi, and Mengyi Zhang Receive the 2018 CUMW WSC Diversity Awards

Giulia Pedrielli, Chair of the Committee on Underrepresented Minorities and Women



Giulia Pedrielli (award committee), Maria Julia Blas, Ana Ionesi, Mengyi Zhang, Eunhye Song (award committee)

To improve the diversity in the simulation community, the INFORMS Simulation Society is proud to award \$500 sponsorships each year to assist eligible graduate students to attend the Winter Simulation Conference. The 2018 diversity awardees are: Maria Julia Blas (INGAR Argentina), Ana Ionesi (University of Southern Denmark), and Mengyi Zhang (Politecnico di Milano).

2019 CALLS FOR PROPOSALS AND NOMINATIONS

2019 Lifetime Professional Achievement Award

Lee Schruben

To recognize major contributions to the field of simulation that are sustained over most of a professional career, with the critical consideration being the total impact of those contributions on computer simulation, the INFORMS Simulation Society (I-Sim, <http://connect.informs.org/simulation/home>) has established the Lifetime Professional Achievement Award (LPAA). This award can be given at most once annually. An individual's contributions may fall in one or more of the following areas:

- contributions to research,
- contributions to practice,
- dissemination of knowledge,
- development of software or hardware,
- service to the profession, and
- advancement of the status or visibility of the field.

Anyone except current Award Committee members is eligible to win the award, although individuals selected for this award should normally be in or near their retirement. Persons cannot be nominated posthumously. A nomination will be fully considered in the year it was received. If unsuccessful the nominee will be reconsidered for up to two further years if not deceased. Once under consideration in a given year and if successful the award may be received posthumously. Nominations may be submitted by anyone (including self-nominations), but they may not be made anonymously. The burden of offering evidence of merit falls on the nominator. Each nomination should include:

- the nominee's complete resumé;
- a clear-cut, comprehensive description of the nominee's major contributions to the profession, with complete supporting documentation; and
- at least three, but no more than six, letters of endorsement providing evidence of the significance and magnitude of the nominee's professional achievements. (Each endorsement letter must come from a single person.)

The committee may at its discretion widen those under consideration for the award to include other eligible persons who were not nominated under the nomination call process.

The deadline for nominations is September 1, 2019. Nominators should alert the committee chair (Lee Schruben, lees@berkeley.edu) of their forthcoming nomination at least one month prior to the deadline. The nomination should be submitted as a PDF file attachment to an email to the committee chair. Any questions should be directed to the committee chair.

A list of previous award recipients, and more details about the award process, can be found at <http://connect.informs.org/simulation/awards/professional-achievement-award>.

The LPAA Award Committee consists of Lee Schruben (Chair, lees@berkeley.edu), Russell Cheng, and David Goldsman. □

2019 Distinguished Service Award

John Fowler

To recognize individuals who have provided long-standing, exceptional service to the simulation community, the INFORMS Simulation Society annually sponsors a Distinguished Service Award, given to at most one person each year. This award is for sustained service to the simulation community over at least fifteen to twenty years or longer, and acquitted with distinction. The concept of service for this award does not include teaching or research contributions. Areas of volunteer service include,

for example: (i) elected offices in simulation societies; (ii) editorial responsibilities such as area editor or editor-in-chief, for simulation; (iii) responsibilities such as program chair, proceedings editor, general chair, or member of the program or organizing committee, for conferences involving simulation; (iv) appointed positions for simulation-related activities, such as newsletter editor or serving on committees; and (v) undertakings and actions that promote simulation.

Nominations for the award to be given in 2019 can be made by anyone and should be sent by September 1, 2019, to the Distinguished Service Award Committee Chair:

John W. Fowler
Professor of Supply Chain Management, Arizona State University
john.fowler@asu.edu

The other committee members are Douglas Morrice (The University of Texas at Austin) and Michael Fu (University of Maryland).

Letters of nomination should identify the nominee's areas of exceptional service, detailing the activities for which the nominee is believed to deserve this award. The nominator has the responsibility for justifying why the nominee should receive this award. If given, the award will be presented at the Winter Simulation Conference in National Harbor, Maryland, December 8 – 11, 2019: <http://www.wintersim.org>. □

2019 Outstanding Simulation Publication Award

Christine Currie

To recognize outstanding contributions to the simulation literature, the INFORMS Simulation Society annually sponsors an Outstanding Simulation Publication Award. Nominations for the award to be given in 2019 should be sent by September 1, 2019 to the Awards Committee Chair:

Christine Currie
Mathematical Sciences
University Of Southampton, UK
christine.currie@soton.ac.uk

The other committee members are Christos Alexopoulos (Georgia Tech) and Pierre L'Ecuyer (Université de Montréal).

Anyone is eligible to win the award. Journal articles, proceedings articles, books, book chapters, and monographs copyrighted in 2016, 2017 and 2018 and written in English are eligible for the award. Technical reports, research memoranda, working papers, theses, and dissertations are not eligible. Nominations for the award may be made by anyone, including the author(s), but they may not be made anonymously.

Nominations should include:

- a copy of the written work, including all bibliographical information (in the case of books, the Awards Committee will obtain copies);
- a short statement suitable for reading at the award ceremony if the work is chosen; and
- any other information thought relevant by the nominator.

If given, the Outstanding Simulation Publication Award will be presented at the

Winter Simulation Conference, National Harbor, Maryland, USA, December 8-11, 2019,
<http://meetings2.informs.org/wordpress/wsc2019/>.

The Award carries with it a cash prize of \$500. Click here for a list of previous award winners:

<http://connect.informs.org/simulation/awards/simulation-publication-award/awardees.> □

I-SIM BUSINESS MEETING MINUTES

INFORMS Simulation Society Business Meeting:

2018 Winter Simulation Conference, Gothenburg, Sweden, December 9, 2018

Susan R. Hunter

For details on many items from these minutes, see the Fall 2019 I-Sim newsletter at <http://connect.informs.org/simulation/simulation-resources/newsletter>.

At 6:22pm, Raghu Pasupathy, President of the Society, called the meeting to order and everyone introduced themselves.

At 6:25pm Raghu Pasupathy thanked the committee members and council members.

At 6:26pm, Raghu Pasupathy announced and discussed upcoming conferences, workshops, and meetings. Please see the newsletter for details.

At 6:29pm, Susan Hunter, Secretary of the Society, presented the Secretary's Report.

At 6:30pm, John Shortle, Past President of the Society, gave the Treasurer's Report on behalf of Jie Xu, Treasurer of the Society. All society expenses occur from September to December, so the numbers are a little deceiving. We have a slightly negative number for the year.

At 6:30pm, Jim Wilson gave a report on the simulation archive.

- Russell Barton has been added to the committee.
- There is a new agreement with NCSU libraries concerning our interaction with them and the functions of the liaison from the NCSU libraries to the activities of the archive.
- One of the big acquisitions we've made lately is to acquire all of Brian Hollocks' books and papers. He was K. D. Tucker's Ph.D. student. This is a major acquisition, which has been completed.
- We are currently in the process of trying to assemble all of the Titan talks. Some of them have been posted to the INFORMS website, others are not. We hope that both slides and videos are going to be posted on the archive website soon.
- We will be augmenting the set of online videos with a set of simulation pioneers; that will be a moving window with new pioneers being introduced.
- The endowment of the archive is currently \$102,501.00. We may request additional funds in the future, but not this year.

At 6:33pm Susan Sanchez noted that Jim Wilson's Titan talk was on youtube. Michael Fu noted that this was 2011.

At 6:34pm, John Shortle gave the nominations committee report. The committee is seeking input on nominations for two I-Sim Council Members. Contact a committee member to nominate people by March 1, 2019.

At 6:35pm, the journal editors' reports began.

- Bruno Tuffin gave the report for INFORMS JOC. Please see the Newsletter for details.
- Raghu Pasupathy gave the report for IISE Transactions. He noted that there are no reliable statistics in the system. He thanks the Associate Editors.
- Raghu Pasupathy gave the report for Operations Research on behalf of Jeff Hong. Please see the Newsletter for details. He thanks the Associate Editors.
- Christine Currie gave the report for Journal of Simulation. Over 200 submissions for 2018 and increasing. Acceptance rate is 10%-20%. Please see the newsletter for additional details. Anything submitted to WSC would fit in the journal.
- Shane Henderson gave the report for Stochastic Systems. The journal publishes more probability-related papers, as opposed to more industrial engineering topics. The journal is open access.
- Andrea Matta gave the report for Flexible Services and Manufacturing Journal. The journal welcomes papers from the simulation community.

At 6:40pm, Russell Barton discussed the I-Sim Workshop. To reduce conference conflicts, the conference has been moved to Summer 2020 at Penn State University.

At 6:40pm Raghu Pasupathy asked for new business. There was none.

At 6:41pm, Giulia Pedrielli presented the 2018 Diversity Awards to Maria Julia Blas, INGAR Argentina; Ana Ionesi, University of Southern Denmark; and Mengyi Zhang, Politecnico di Milano.

At 6:43pm, John Shortle presented the Ph.D. Colloquium awards on behalf of Emily Lada. There were 25 talks in 2 tracks on Sunday, with a poster session afterwards. The keynote was by Prof. Stewart Robinson.

- The winner of the I-Sim Award is David Eckman for his paper "Green Simulation Optimization Using Likelihood Ratio Estimators." M. Ben Feng is a co-author of the paper.

At 6:45pm, Sanjay Jain discussed the WSC 2018 Best Paper awards. He thanked the committee members again.

- The best theoretical paper award went to Henry Lam and Fengpei Li. Sanjay Jain read a quote from one of the nominators for the award, and presented the awards to Henry Lam and Fengpei Li.
- He also discussed and recognized the best applied paper, which went to Tobias Granberg and Hien Nguyen.

At 6:48pm, Christos Alexopolous presented the 2018 Outstanding Publication Award to Boris Oreshkin, Nazim Regnard and Pierre L'Ecuyer for their paper, Rate-Based Daily Arrival Process Models with Application to Call Centers, *Operations Research* 64(2), 510–527, 2016.

At 6:51pm, Doug Morrice presented the 2018 Distinguished Service Award to Michael

Fu and discussed Michael Fu's long history of outstanding service. Three things stood out to the committee about Michael and his service: its breadth and depth, his commitment to excellence, and his humility.

At 6:58pm, Russell Cheng presented the 2018 Lifetime Professional Achievement Award to Jim Henriksen, who was unable to attend the business meeting. Jim Wilson read the acceptance speech on behalf of Jim Henriksen.

At 7:16pm, Raghu Pasupathy called for adjournment, and the meeting was adjourned.

Attendees: To deter email harvesting, @ has been replaced with <of>.

Bruno Tuffin Bruno.Tuffin<of>inria.fr
 Susan Hunter susanhunter<of>purdue.edu
 Doug Morrice morrice<of>mail.utexas.edu
 Russell Cheng cheng<of>btinternet.com
 Christos Alexopoulos christos<of>gatech.edu
 Sanjay Jain jain<of>gwu.edu
 Michael Kuhl mekeie<of>rit.edu
 Pres White kpwhite<of>virginia.edu
 Enver Yücesan enver.yucesan<of>insead.edu
 John Shortle jshortle<of>gmu.edu Clemens Wolff clemens.wolff<of>hit.edu
 Maha Ben Ali maha.ben-ali.1<of>ulaval.ca
 Jennifer Lather lather<of>psu.edu
 Paul Sanchez pjsanche<of>nps.edu
 Susan Sanchez ssanchez<of>nps.edu
 Shane Henderson sgh9<of>cornell.edu
 David Eckman dje88<of>cornell.edu
 Michael Fu mfu<of>umd.edu
 Maria Julia Blas mariajuliablas<of>santafe-conicet.gov.ar
 Andrea Matta andrea.matta<of>polimi.it
 Arianna Alfieri arianna.alfieri<of>polito.it
 Marvin Nakayama marvin<of>njit.edu
 Xiaowei Zhang xiaowei.w.zhang<of>cityu.edu.hk
 Peter Frazier pf98<of>cornell.edu
 Peter Haas phaas<of>cs.umass.edu
 Christine Currie christine.currie<of>soton.ac.uk
 Stewart Robinson s.l.robinson<of>lboro.ac.uk
 Barry L. Nelson nelsonb<of>northwestern.edu
 Kevin T. Comer ktcomer<of>mitre.org
 Wendy Xi Jiang xijiang2020<of>u.northwestern.edu
 Linda Pei lindapei2016<of>u.northwestern.edu
 Steve Chick stephen.chick<of>insead.edu
 Andres Alban andres.alban<of>insead.edu
 Bjorn Berg bberg<of>umn.edu
 Huifen Chen huifen<of>cycu.edu.tw
 Mengyi Zhang mengyu.zhang<of>polimi.it
 Ziwei Lin linziwei<of>sytu.edu.cn
 Ana Ionesi ai<of>mci.sdu.dk
 Pierre L'Ecuyer lecuyer<of>iro.umontreal.ca

INFORMS-Sim News • SPRING 2019

Young-Jun Son son<of>sie.arizona.edu
Ben Feng ben.feng<of>uwaterloo.ca
Juan Sarli juanleonardosarli<of>santafe-conicet.gov.ar
Giulia Pedrielli gpedriel<of>asu.edu
John Fowler john.fowler<of>asu.edu
Huajie Qian h.qian<of>columbia.edu
Hernan Awad hernanaw<of>amazon.com
Henry Lam henry.lam<of>columbia.edu
Yijie Peng pengyijie<of>pku.edu.cn
Eunhye Song eus358<of>psu.edu
Russell Barton rbarton<of>psu.edu
Dave Goldsman sman<of>gatech.edu
Fengpei Li fl2412<of>columbia.edu
Chick Macal macal<of>anl.gov
Chaitanya Kaligotla ckaligotla<of>anl.gov



I-SIM BALLOTS

I-Sim Elections Ballot for Council Members

John Shortle, Past President

I-Sim is holding an election for two Council Members. Council members serve two-year terms starting July 1. There are four council members in total, serving on a rotating basis (two elected each year).

To vote in the election for I-Sim Council Members, return the ballot below by e-mail or mail by **June 30, 2019** to:

John Shortle
George Mason University
4400 University Dr., MSN 4A6
Fairfax, VA 22030
E-Mail: jshortle@gmu.edu

If you use email, please include the words "I-Sim Ballot" in the subject line.

The candidates are presented in alphabetical order.

COUNCIL (vote for up to two)

_____ EMILY LADA

_____ HENRY LAM

_____ GUANGWU LIU

_____ CAROLINA OSORIO

This part will be used only to certify the ballot — your vote will be kept confidential. Your e-mail address will serve as your signature if you vote electronically.)

Your name (print): _____

Your signature: _____

□

Candidate Biographies

EMILY LADA is a simulation consultant and an adjunct professor of mathematics at Meredith College. In addition to teaching at Meredith, she is developing new courses in data science and operations research. Previously, she was a Principal Operations Research Specialist and the Simulation Studio team lead at SAS, with duties that included the definition and design of software features for Simulation Studio. She also assisted the SAS/OR consulting group with simulation projects in areas ranging from neonatal intensive care to pharmaceutical manufacturing and criminal-justice administration. She has an M.S. and a Ph.D. in operations research from North Carolina State University and a B.A. in mathematics from the University of North Carolina at Chapel Hill. In 2004, she was awarded first place in the IIE Pritsker Doctoral Dissertation Competition. She has published papers in the WSC Proceedings as well as the journals of ACM, IEEE, IIESE, INFORMS, and The OR Society (UK). She has served as chair of INFORMS-Sim's Communications Committee and the Committee for Underrepresented Minorities and Women; and she has served as session chair for both the INFORMS annual meetings and WSC. She also served on WSC's Ph.D. Colloquium Committee from 2015 to 2018, chairing the committee in 2017.

HENRY LAM is an Associate Professor in the Department of Industrial Engineering and Operations Research at Columbia University. He received his Ph.D. in statistics from Harvard University in 2011, and was on the faculty of Boston University and the University of Michigan before joining Columbia in 2017. Henry's research interests include Monte Carlo methods, rare-event and extremal analysis, uncertainty quantification, and optimization under uncertainty. His work has been recognized by several venues such as the NSF CAREER Award (2017), INFORMS JFIG Paper Prize (Second Prize in 2016, Finalist in 2012), WSC Best Theoretical Paper (2018), Adobe Faculty Research Award (2016), and George Nicholson Student Paper Honorable Mention Prize (2010). He is an Associate Editor for Operations Research, INFORMS Journal on Computing and Stochastic Models. He has been an INFORMS Applied Probability Society Council Member since 2017, co-chaired the Applied Probability Cluster in INFORMS Annual Meeting 2018, served on the Program Committee in WSC for the Analysis Methodology Track (2015, 2016, 2018) and the Simulation Optimization Track (2016, 2017, 2018), and coordinates the new Uncertainty Quantification and Robust Simulation Track in 2019.

GUANGWU LIU is a Professor in the Department of Management Sciences, College of Business at City University of Hong Kong. He received his PhD degree from The Hong Kong University of Science and Technology in 2009. His research interests include stochastic simulation, machine learning, financial engineering and risk management. His research work has appeared in leading journals of the field, including *ACM Transactions on Modeling and Computer Simulation*, *INFORMS Journal on Computing*, *Management Science*, and *Operations Research*. He was a recipient of I-Sim's 2012 Outstanding Publication Award, and the 2012 Early Career Award from the Research

Grants Council of Hong Kong. He currently serves as an Associate Editor for *Naval Research Logistics* and *Asia-Pacific Journal of Operational Research*.

CAROLINA OSORIO is an Associate Professor in the Department of Civil and Environmental Engineering (CEE) and in the Operations Research Center (ORC) at the Massachusetts Institute of Technology (MIT). Her work develops operations research techniques to inform the design and operations of urban mobility systems. It focuses on simulation-based optimization algorithms for, and analytical probabilistic modeling of, congested urban road networks. She was recognized as one of the outstanding early-career engineers in the US by the National Academy of Engineering's (NAE) EU-US Frontiers of Engineering Symposium, and is the recipient of a US National Science Foundation CAREER Award, an MIT CEE Maseeh Excellence in Teaching Award, an MIT Technology Review EmTech Colombia TR35 Award, an IBM Faculty Award, an INFORMS TSL Outstanding Paper in Urban Transportation Planning and Modeling Award, and a European Association of Operational Research Societies (EURO) Doctoral Dissertation Award.

□

UPCOMING EVENTS

Event Calendar

Canan G. Corlu

INFORMS International Conference, Cancun, Mexico,
June 9 – 12, 2019, <http://meetings2.informs.org/wordpress/2019international/>

36th International Conference on Machine Learning, Long Beach, California,
June 10 – 15, 2019, <https://icml.cc/Conferences/2019>

32nd Annual Conference on Learning Theory (COLT), Phoenix, Arizona,
June 25 – 28, 2019, <http://learningtheory.org/colt2019>

20th INFORMS Applied Probability Conference (INFORMS-APS), Brisbane, Australia,
July 3 – 5, 2019, <https://informs-aps.smp.uq.edu.au/>

12th International Conference on Monte Carlo Methods and Applications, Sydney, Australia,
July 8 – 12, 2019, <http://www.mcm2019.unsw.edu.au>

10th International Workshop in Simulation and Statistics, Salzburg, Austria,
September 2 – 6, 2019, <http://datascience.sbg.ac.at/SimStatSalzburg2019/>

2019 INFORMS Annual Meeting, Seattle, WA
October 20 – 23, 2019, <http://meetings2.informs.org/wordpress/seattle2019/>

2019 Winter Simulation Conference, National Harbor, Maryland
December 8 – 11, 2019, <http://meetings2.informs.org/wordpress/wsc2019/>

□



5521 Research Park Drive
Suite 200
Catonsville, MD 21228