

# The CORS Bulletin

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# IN THIS ISSUE

Dear CORS Members,

It's time to start thinking about deserving nominees for next year's Harold Larnder prize, Omond Solandt award, the Service Award, and the Award of Merit. Review the criteria and note the deadlines so you can get your submissions in on time.

We're looking ahead to next year's CORS 2018 conference in Halifax, NS, and that means paper competitions, practice prizes, and a special interest group competition are now open for submissions. Conference registration and abstract submissions will open on November 22, 2017. Hotels are ready to book at the special CORS rate, with the option of extending your stay by three days on either side of the conference. Come join us in Nova Scotia for the 60th annual CORS conference!

Lastly, we have a few updates from our special interest groups and section chapters on what they've been up to this quarter.

If you have content you would like to see in the next bulletin, please submit it to me at AndreaFriars@gmail.com

Cheers,

Andrea Friars

Editor

Editor

Andrea Friars

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# THE 2017–2018 COUNCIL

CORS Council consists of the officers of the society, four councillors, the immediate past president, a representative designated by each local section and chapter of the society, and the standing committee chairs. Contact information for council representatives is below. See <a href="https://www.cors.ca">www.cors.ca</a> for a complete listing.

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Toronto Adam Diamant, York University, ADiamant@schulich.yorku.ca

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Calgary Neil Barnes, Canadian Natural Resources Limited, neil.barnes@cnrl.com
Edmonton Armann Ingolfsson, University of Alberta, armann.ingolfsson@ ualberta.ca
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Christopher Sun, University of Toronto, christopher.sun@mail.utoronto.ca

Waterloo Student Abdelhalim Hiassat, University of Waterloo, ahhiassat@uwaterloo.ca

Québec Student Samira Abbasgholizadeh Rahimi, Université Laval, samiraheme@yahoo.com

Montréal Student Carlos Armando Zetina, Concordia University, c\_zetina@encs.concordia.ca



# PRESIDENT'S MESSAGE

Hello fellow CORS members,

The fall semester is in full swing and as I write this letter, INFORMS is just around the corner. More importantly, Halloween, my absolute favourite holiday, is just a couple weeks away. I am already calculating the square footage of fake spider webs I need to buy, and am trying to remember where I put the fog machine. So much to be excited about this time of year!

There is not much to report on with regards to CORS and CORS Council right now. Council last met in August, and we will meet again in Toronto in January. We are mostly working on small, but important, minutia, e.g., developing a privacy statement to codify our commitment to not doing anything evil with your information, as Google used to say. And by evil, I mean sharing your information



in any way not required by law or financial reporting to the government. We are also finalizing the location of CORS 2019, which will be held somewhere new to CORS! If you want to be involved in any way in the conference, let General Chair Fredrik Odegaard (fodegaard@ivey.ca) know.

The **new logo competition** is underway, and there are a handful of submissions so far. If you are thinking of submitting, go for it! You have until December 18. Finalists will receive \$100 and a chance to have their design immortalized on the CORS website, conference banners, and official documents. Members will then vote between the finalists' designs and the old logo. Click on the New Logo Competition link on our website (www.cors.ca) for submission details.

I hope to see many Canadians at INFORMS in Houston, and if I don't see you, have a great rest of the semester and a Happy New Year!

Dionne Aleman @CORS\_President





# **CORS 2018**

June 4-6, 2018

Halifax, Nova Scotia www.CORS2018.ca

#### **VENUE - HALIFAX CONVENTION CENTRE**

This year's conference will be held in the Halifax Convention Centre, the city's newest (opening later this year), state-of-the-art conference venue. Opening later this year, the centre is part of a \$500-million integrated development project, the largest ever in Nova Scotia. Located in the heart of downtown, within walking distance of fantastic dining, the Halifax waterfront's recently renovated boardwalk, and a variety of entertainment options. Find out more and watch for updates at the Halifax Convention Centre website.

#### **HOST CITY - HALIFAX, NOVA SCOTIA**

Get your recommended dose of Maritime hospitality and ocean views in gorgeous Halifax. Did you know that one out of every five Canadians is related to someone who passed through Halifax's Pier 21? And its six degree granting universities mean that the city has three times the national average of students per capita. A fact which may or may not be linked to why Halifax also boasts one of the highest rates of bars per capita in the country.



#### ACCOMMODATIONS - HAMPTON INN AND HOMEWOOD SUITES BY HILTON

CORS 2018 host hotels are the Hampton Inn and Homewood Suites, joint buildings with shared facilities. They are a short 7 minute walk alongside historic Citadel Hill to the convention centre. Special CORS discounted pricing is available from May 30 - June 10, so attendees can plan to come early or stay after the conference and make the most of what Halifax has to offer. Click here and book now to secure the following rates:

- Hampton Inn \$184/night (includes daily hot buffet)
- Homewood Suites \$199/night (includes daily hot buffet and evening refreshments Mon-Thu)



#### CHOW COLLABORATION

This year's Canadian Healthcare Optimization Workshop (CHOW) will take place June 6<sup>th</sup>, overlapping with the last conference day of CORS2018. CHOW will include extended paper presentations by senior PhD students and early career researchers as well as a keynote session and panel discussion. Please watch <a href="https://www.cors2018.ca">www.cors2018.ca</a> and the CORS listsery for details.

#### REGISTRATION AND ABSTRACT SUBMISSION

Opens November 22, 2017.

Please check www.CORS2018.ca for updates.



## HAROLD LARNDER PRIZE

The Harold Larnder Prize is awarded annually to an individual who has achieved international distinction in operational research. The prize winner delivers the Harold Larnder Memorial Lecture, on a topic of general interest to operational researchers, at the National Conference of the Canadian Operational Research Society. Harold Larnder was a well-known Canadian in wartime OR. He played a major part in the development of an effective, radar-based, air defense system during the Battle of Britain. He returned to Canada in 1951 to join the Canadian Defence Research Board and was President of CORS in 1966-67.

Please submit nominations by **February 12, 2018** to:

Mehmet Begen, CORS Awards Committee Chair (mbegen@ivey.uwo.ca)

## OMOND SOLANDT AWARD

The Omond Solandt Award is awarded to an organization, private or governmental, that is deemed to have made an outstanding contribution to operational research in Canada. Dr. Solandt was the founder and first chairman of the Defence Research Board (DRB). At various times in his life he headed the Science Council of Canada was a vice-chairman of Canadian National Railways (CNR), and Chancellor of the University of Toronto.

Please submit nominations by **January 29, 2018** to:

Mehmet Begen, CORS Awards Committee Chair (mbegen@ivey.uwo.ca)

# **CORS AWARD OF MERIT**

The Award of Merit acknowledges significant contributions of a current or past member of CORS to the profession of Operational Research. Significant contributions can include:

- being specially recognized as an operational research practitioner;
- the development of a methodology relevant to the use of operational research;
- the supervision and development of operational research competence in others;
- the promotion of operational research in Canada through talks, presentations, articles, books, or by other means;
- service to CORS at either the national or local level.

Please submit nominations to:

Fredrik Ødegaard, CORS Award of Merit Committee Chair (fodegaard@ivey.uwo.ca)



# **CORS SERVICE AWARD**

If you know of anyone who has dedicated their time to CORS and who has a longstanding service record, please consider nominating him or her for the CORS Service Award. CORS Council urges all local sections to consider and nominate their best candidates. Nominations should include the candidate's name, activities, positions and corresponding years of service. The Awards Committee will evaluate the submissions and bring forward potential recipients to Council for approval. Nominees will be evaluated based on a point system. As a guideline, winners should have 2000 or more points. Previous winners are not eligible for additional service awards. A list of past recipients may be found at

www.cors.ca/?q=content/service-award

Please submit nominations by March 5, 2018 to:

Mehmet Begen, CORS Awards Committee Chair (mbegen@ivey.uwo.ca)

# **Service Award Point System**

Responsibility	Points	Responsibility	Points
CORS Council		Publications	
President	500	Bulletin Editor	350
Vice-President	350	INFOR Editor	350
Secretary	300	Special Editions	150
Treasurer	300	Others	200
Councillor	250		
Appointed Member	200	Local Council	
Past-President	150	President	350
		Vice-President	250
International Conference		Secretary	200
Conference Chair	350	Treasurer	200
Committee Chair	300	Others	150
Committee Member	200	Past-President	100
National Conference		Miscellaneous	
Conference Chair	300	IFORS Executive	250
Committee Chair	250		
Committee Member	200		



# **CORS PRACTICE PRIZE**

The Practice Prize Competition recognizes the outstanding application of OR by practitioners in Canada and it attracts quality papers to the CORS Annual Conference.

**Award:** The Prize Committee will determine, at its discretion, First, Second and Honourable Mention awards and the distribution of up to \$1800 in prize money according to the extent to which the finalists have reported on a completed, practical application with results that had a significant, verifiable and (preferably) quantifiable impact on the performance of the client organization. Every member of the winning teams receives a certificate.

**Eligibility:** The applicant must be a resident of Canada. The submission must include work completed over the last two years, but the entire project may have taken place over a longer period. The project may include published work, but it cannot have been previously submitted to this competition.

#### **Application Instructions:**

By February 28, 2018 submit e-copies of the following to:

Mikael Rönnqvist, Chair (mikael.ronnqvist@gmc.ulaval.ca)

- 1. An abstract, not exceeding 500 words, outlining the successful application of OR;
- A letter from an executive of the client organization attesting that the application had an impact and giving permission for the project to be presented at the CORS Annual Conference;
- 3. The names, titles, phone numbers and email addresses of all authors and of at least one executive of the client organization.

**By March 16, 2018** the judging committee will select up to four finalists according to these criteria:

- 1. The challenge of the application of OR and the significance of the problem.
- 2. The quality of the analysis and modeling, and implementation of the results.
- 3. The impact on the client organization.

#### By May 18, 2018 the finalists must:

- 1. Submit a detailed written report, not exceeding 25 pages in the body, presenting a "case history" of the project describing its development from start to finish and focussing on the challenges and results.
- 2. Submit a one-page project summary, suitable for publication in the CORS Bulletin and on the CORS website.
- 3. Present the project at the Practice Prize Sessions at the CORS Annual Conference.

On the basis of the written report and the oral presentation, the judges will determine the prizes to be awarded and announced at the banquet. The committee reserves the right not to award any prize.



## CORS STUDENT PAPER COMPETITION

Each year the Canadian Operational Research Society conducts a student paper competition to recognize the contribution of a paper either directly to the field of operational research through the development of methodology or to another field through the application of operational research. The competition showcases the high quality of OR education in Canada as well as the excellence of the new generation of operational researchers. Prizes are awarded in two categories: Undergraduate and Open.

**Requirements:** The applicant must be enrolled as a full-time student in a Canadian institution, in an undergraduate, masters, or PhD program during the school year 2017–2018. Canadians who are studying outside of Canada are also eligible. Applicants in undergraduate programs are eligible to apply in both categories: Open and Undergraduate.

**Instructions:** Applicants fill out the online application form (http://cors.ca/?q=content/student-paper-competition). The form is automatically submitted to the Chair of the competition.

The application deadline for the Open Category is March 31, 2018.

For the Undergraduate Category, candidates must submit their intent to participate by sending an email with the title and abstract to spc@cors.ca

The deadline to indicate your intent to participate is **March 1, 2018**.

The full paper should be submitted by March 31, 2018.

Chair, Open Category: Nadia Lahrichi (nadia.lahrichi@polymtl.ca)
Chair, Undergraduate Category: Stan Dimitrov (sdimitro@uwaterloo.ca)

#### The entry includes:

- Abstract of 200 words or less. Author's name, address, phone number, and email address.
   Make sure the abstract clearly highlights the motivation, contribution, and potential impact
   of the paper.
- 2. Academic institution and supervisor's name, if applicable.
- 3. Indication of whether the author is planning to attend the conference regardless of the outcome. Note that papers selected as Finalists must be presented at the conference in order to further be considered for First Prize or Honourable Mention.
- 4. Indication of whether the paper is submitted to a journal.
- 5. A PDF copy of the paper:
- No longer than 35 pages (with minimum 1-inch margins, maximum 34 lines per page and minimum font size of Times 11) including all figures, tables, appendices, and references.
- With separate title page containing the name of the authors, their coordinates and affiliations. Please ensure there are no identifiers on the other pages;
- 6. An email from the supervisor indicating that the participant is the first author of the paper should be sent to the Competition Chair.



#### **Selection Criteria:**

- Contribution of the paper either directly to the field of Operational Research through the development of methodology or to another field through the application of Operational Research
- Originality
- Writing style, clarity, organization and conciseness of the paper

#### Awards:

- Open Category: First Prize \$500, Honorable Mention \$100
- Undergraduate Category: First Prize \$200, Honorable Mention \$50
- All papers selected as Finalists receive a certificate.
- If an undergraduate wins the open competition, no undergraduate prize will be awarded. In the case of close competition, papers not winning an award may receive honourable mention.
- Finalists selected for the undergraduate category will be eligible to apply for partial funding to attend the CORS Annual Conference. The Education Chair will contact finalists with details.

# **CORS FUNDING OPPORTUNITIES**

## **Graduate Student Funding**

CORS funds graduate students attending CORS annual meetings, using funds from SSHRC, when available. This funding is subject to availability and the following eligibility criteria:

- Student is a member of CORS, enrolled in a graduate program in a field related to operational research, studying at a Canadian university, or student is a Canadian citizen or permanent resident studying abroad
- Student must attend the conference and present their registration receipt to receive any funding

The following criteria will be used to determine the amount awarded to each eligible applicant:

- If the applicant is presenting a paper at the conference.
- Travel cost from student's home city to the conference.

The application deadline is March 31, 2018

Anjali Awasthi, CORS Education Chair (anjali.awasthi@concordia.ca)

# Traveling Speakers Program (TSP)

The TSP enables local sections to bring Canadian OR practitioners / researchers as speakers to their local events. In order to keep costs in line while maximizing the CORS national profile, CORS sponsorship will be limited to 50% of the total expenses, up to a maximum of \$500 per speaker or \$1000 for a single event (conference, workshop). Other expenses can be covered by the local section. The program of the event must acknowledge the contribution of CORS. Each local section must contact the TSP coordinator to obtain approval for funding preferably at least **one month** in advance of the event date. Payment will be made by the CORS Treasurer upon receipt of the expense form (http://www.cors.ca/?q=content/traveling-speakers-program).

Fredrik Ødegaard, TSP Coordinator (fodegaard@ivey.uwo.ca)



# **CORS SPECIAL INTEREST GROUPS**

CORS Council approved a policy on Special Interest Groups (SIGs). A SIG provides a mechanism to promote CORS, the SIG area and the SIG members, as well as the opportunity for CORS members with common interests to interact and network.

#### SIGs formed so far include:

CORS Forestry SIG

contact Tasseda Boukherroub (tasseda.boukherroub@cirrelt.ca) École de technologie supérieure www.cors.ca/SIG/Forestry

CORS Health Care Operational Research SIG

contact Sonia Vanderby (sonia.vanderby@usask.ca) University of Saskatchewan www.cors.ca/SIG/HCOR

CORS Queueing Theory SIG

contact Qi-Ming He (q7he@uwaterloo.ca) University of Waterloo www.cors.ca/SIG/Queueing

If you would like to join a SIG, contact the people listed above, or indicate that you would like to join when you renew your CORS membership.

CORS encourages members with common interest in an area within or related to operational research to form additional SIGs. More information about SIGs can be found online at www.cors.ca/?q=content/communities

If you are interested in forming a SIG in a particular area, contact:

Mehmet Begen, SIG Committee Chair (mbegen@ivey.uwo.ca)



# SIG NEWS

## **Queueing Theory SIG**

- 1. The fifth annual student prize competition (2017) We are happy to announce that this year's winner is Vincent Maccio, McMaster University, for his paper entitled "Exact Analysis of Energy-Aware Multiserver Queueing Systems with Setup Times", published in IEEE 24th International Symposium on Modeling, Analysis and Simulation of Computer and Telecommunication Systems, 2016, pages 11-20. Congratulations to Vincent Maccio.
- **2.** The sixth annual student prize competition (2018) The submission deadline for next year's competition is **January 31, 2018**. Please send your submission to award committee chair Dr. Yiqiang Zhao (zhao@math.carleton.ca). For more information requirements and eligibility, go to http://www.cors.ca/SIG/Queueing/?q=content/current
- **The joint CORS/IFORS conference** The Queueing SIG members contributed four technical sessions to the Queueing Cluster, and one keynote talk (by Dr. David Stanford) at the conference. Thanks go to all the session organizers and speakers.
- **4.** CanQueue 2017 CanQueue 2017 was held successfully in Windsor, Ontario, from August 18 to 19, 2017. There were more than twenty-three participates and fifteen presentations. Among the participants, more than half of them were graduate students. Thanks go to conference chair Dr. M. Hlynka and his team. More information on the conference can be found at http://web2.uwindsor.ca/math/hlynka/canqueue2017.html
- **5.** CanQueue 2018 We are glad to announce that CanQueue 2018 will be held in Alberta and organized by Dr. Armann Ingolfsson (armann.ingolfsson@ualberta.ca). Conference information will be available soon.
- 7. Membership renewal Currently, the Queueing SIG has 84 members. Please renew your Queueing SIG membership at the same time as your CORS membership. For more information about the Queueing SIG, please visit the webpage http://www.cors.ca/SIG/Queueing/?q=content/welcome, and/or contact the Queueing SIG president Dr. Qi-Ming He at q7he@uwaterloo.ca.

# **Forestry SIG**

Information about the *Forestry SIG David Martell Student Paper Prize in Forestry* will be in the next CORS Bulletin issue and on the website at http://www.cors.ca/SIG/Forestry

# **Health Care Operational Research SIG**

Information about the *Health Care Operations Research SIG Student Presentation Prize* will be in the next CORS Bulletin issue and on the website at http://www.cors.ca/SIG/HCOR



# **SECTION AND CHAPTER NEWS**

#### Montréal Section

On September 22, the CORS local section of Montreal organized with CIRRELT a seminar entitled "Stochastic optimization at Airbus: recent advance on continuous algorithms and perspectives on flight planning". The seminar was given by Clément Bouttier, who has been hired by Airbus directly after his PhD thesis at the University of Toulouse.

In front of an audience composed by professors, students and industry experts, Dr. Bouttier focused on various optimization issues that are present in the research group he joined. The first part covered part of Clément's thesis where he revisited the approach proposed by Piyavskii in 1972 in the context of global optimization and the bandit problems, establishing novel convergence properties. The second part exposed questions currently investigated at Airbus to optimize flight planning, taking account of the various uncertainties source occurring during the journey, from take-off through to landing. The problem is of critical importance to design and operate the airplane at minimal cost while ensuring the highest degree of safety, and offers many research opportunities for the operations research community.



#### Séminaire conjoint du CIRRELT avec la SCRO **CIRRELT Joint Seminar with CORS**

# Clément Bouttier

Airbus, Toulouse, France





#### STOCHASTIC OPTIMIZATION AT AIRBUS: RECENT ADVANCE ON CONTINUOUS BANDITS ALGORITHMS AND PERSPECTIVES ON FLIGHT PLANNING

Abstract: In this presentation, we will shortly present some of the theoretical research work that has been performed recently about continuous Lipchitz Bandits algorithms. In the framework of a recent PhD thesis about stochastic black box optimization, we have been investigating the theoretical performance as measured by the bandit community of a famous optimization algorithm proposed by Piyavskii in 1972. It was already well known by the optimization community that this algorithm numerically outperforms most comparable algorithms. Nevertheless clear statements about its theoretical convergence property were still missing, especially in dimension higher than one. We have shown that this algorithm exhibits state of the art global convergence property and that it can be extended to a stochastic context and still hold state of the art convergence rates.

Following this technical introduction we will provide some high-level inside about Airbus' interest in investigating such algorithms. We will especially focus on the flight planning problem. Among the numerous stochastic optimization problems that Airbus is facing, the flight planning problem in stochastic environment is most probably one of the most challenging one. In this second part we will thus present a simple formulation of this problem that suits the previously introduced framework. Then we will open a discussion about other possible approaches we would like to investigate.

VENDREDI / FRIDAY

22 septembre 2017 September 22nd, 2017 10h30

Salle / Room 5441 Pavillon André-Aisenstadt Université de Montréal

Ouvert à tous / Open to all

Organisateur / Organizer **Fabian Bastin** 

















## **Montréal Student Chapter**

The beginning of the 2017-2018 academic year brought a new organizing team, new collaborations, a revamped website and, of course, a series of exciting events for members of the CORS/INFORMS Montréal Operations Research Student Chapter (MORSC) (www.mtl-students.com). Following their election, the new team held its first general assembly for 2017-2018. Among the points discussed were the presentation of the new committee members, a review of last year's activities and motions to pursue new collaborations with organizations such as the Institute for Data Valorization (IVADO), the Mechanical, Industrial and Aerospace Engineering graduate student committee at Concordia (MIAE GSC), the IISE student chapter and the IEEE Montréal chapter. All motions were approved unanimously by the attending members.



Figure 1: MORSC committee at the fall 2017 General Assembly

As part of its collaboration with the MIAE GSC (http://miaegsc-concordia.com/), chapter members can now take advantage of a joint speaker series that hosts industry and research leaders in the fields of mechanical, industrial and aerospace engineering; bi-monthly coffee breaks; and networking events. These offer an ideal environment for knowledge sharing and collaboration between operations research, mechanical and aerospace engineering students, while increasing the visibility of our field to other domains.

Another result of this collaboration was the scientific communication workshop and public lecture given by Jorge Cham, Ph.D., creator of PhD comics (www.phdcomics.com). With the additional support of the Graduate Student Community Building Fund and the Dean of Engineering and Computer Science at Concordia, chapter members had the opportunity to attend the scientific communication workshop given by Cham, where he presented ideas on how to share your research with the public. Attendees participated in exercises to improve their non-technical communication skills and ability to engage a general audience: skills that have become ever more relevant in today's world.





Figure 2: Jorge Cham presenting his Scientific Communication Workshop

Following the workshop was Jorge's public lecture, which gave over 100 graduate students from multiple departments and universities along with faculty members the opportunity to witness Jorge's comedic rendition of graduate student life. The recently renovated speaker room at the John Molson School of business at Concordia was bursting with laughter and cheers as Jorge narrated his story and the nuances of the typical graduate experience in his talk titled "The power of procrastination". The event concluded with Jorge signing autographs and taking selfies with attendees at the post-event reception.



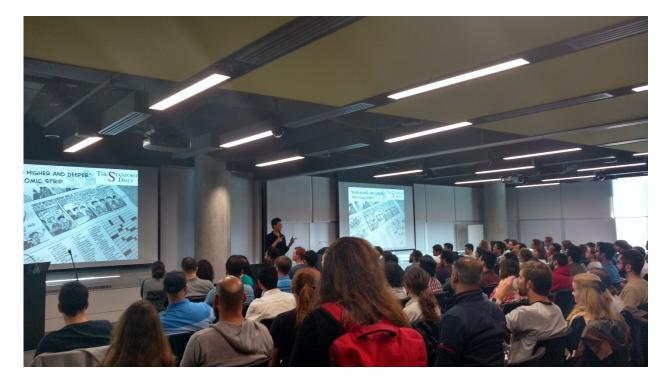


Figure 3: Jorge Cham's public lecture "The power of procrastination"

Among the upcoming fall activities are the traditional joint student seminars and a new tutorial series organized with our long-time partners CIRRELT (www.cirrelt.ca) and GERAD (www.gerad.ca). The chapter is also collaborating on a yearlong writing activity for operations research students organized with CIRRELT, GERAD and the Canada Research Excellence Chair in Data Science for Real-time Decision Making (http://cerc-datascience.polymtl.ca/).

The goal of the writing activity is to provide students with experience and advice for the peer-reviewed publishing process. It is comprised of two workshops. The first is given by Prof. Gilbert Laporte of HEC Montréal, who will enlighten students on how to properly write a scientific paper, while the second by Prof. Walter Rei of UQAM will provide guidelines for responding to reviewers. Participants are expected to submit an extended abstract of 4-6 pages that will be revised by an editorial committee, replicating the peer-review process. The three best papers will receive awards at the annual "Journées de l'optimisation" in May 2018.

We conclude this segment with the news that the chapter has been awarded an INFORMS cum laude award for its activities in 2016. The award will be given at the 2017 INFORMS annual meeting to be held in Houston. As part of the new outreach activities, this and other news will be shared on our now regular social media events including #LearnLundi #TwitterTuesday and #FrenchFriday. To stay up to date on the activities of the CORS/INFORMS Montréal Operations Research Student Chapter follow us on twitter (www.twitter.com/OR\_MTLchapter), Facebook (www.facebook.com/ORMTLchapter), or sign up to our mailing list at (https://www.mtl-students.com/join-morsc).





#### Faculty Position in Management Science (Data Science, Business Analytics)

The **Ivey Business School** at Western University seeks candidates for a Probationary (tenure-track) appointment at the rank of Assistant Professor or Associate Professor, or a Tenured appointment, at the rank of Associate Professor in the **Management Science** area, which includes **Data Science and Business Analytics.** A Limited Term or Visiting appointment may also be considered; rank to be determined by qualifications and experience. The position is available to begin in July 2018, although alternate start dates may be arranged.

The successful candidate will contribute and complement to the school's extensive research on Management Science and Business Analytics, specifically, with regard to Revenue Management, Health Care, Supply Chain Management, and Optimization. The successful candidate will be expected to teach management science subjects (including business analytics, management statistics and data science) in our student-centered, case-based undergraduate, MBA, or EMBA programs, or in the MSc or PhD programs. Ivey is the world's second largest distributor of case studies.

TENURED POSITION: Applicants for a tenured appointment at the rank of Associate Professor will hold a PhD (or equivalent degree). The successful candidate will have demonstrated the ability to publish in the highest quality academic outlets and is a recognized expert in his or her field of research as demonstrated through a vigorous research program, external research funding and invited talks/conferences. Demonstrated ability to successfully teach in core undergraduate and/or MBA courses using a case discussion format is required.

PROBATIONARY (TENURE-TRACK) POSITION: Applicants for a probationary (tenure-track) appointment at the rank of Assistant Professor or Associate Professor must already have, or be nearing completion of, their doctorate. The ideal candidate should have a strong academic background as demonstrated in the ability to publish in high quality academic outlets. The ability to teach in core undergraduate, MSc and/or MBA courses using a case discussion format is essential.

LIMITED TERM POSITION: Applicants for a Limited Term appointment are expected to hold at least a Masters' degree. The successful candidate will have demonstrated excellence in case teaching in core undergraduate and/or MBA courses using a case discussion format.

APPLICATION PROCEDURE: Applicants are encouraged to submit materials (curriculum vitae, three letters of recommendation and copies of research papers) online to <a href="mailto:faculty/career-opportunities/">faculty/career-opportunities/</a> for details). Please ensure that the form available at <a href="http://www.uwo.ca/faculty/elations/faculty/Application-FullTime-Faculty-Position-Form.pdf">http://www.uwo.ca/faculty/elations/faculty/Application-FullTime-Faculty-Position-Form.pdf</a> is completed and included in your application submission. Review of applicants will commence on October 14, 2017; as interviews will start at the INFORMS and DSI conferences. Applications will be considered until the position is filled.

The **Ivey Business School** is Canada's premier business school and is recognized globally for the quality of its management education and research. The School's major activities include: a highly



regarded MBA program and undergraduate program; a well-established doctoral program; a diverse portfolio of executive programs; and the launch of a new MSc stream in Data Analytics. The School is internationally oriented in terms of curricula, research, faculty, and student exchanges, with campuses in London (Canada), Toronto and Hong Kong.

Positions are subject to budget approval. Applicants should have fluent written and oral communication skills in English. The University invites applications from all qualified individuals. Western is committed to employment equity and diversity in the workplace and welcomes applications from women, members of racialized groups/visible minorities, Aboriginal persons, persons with disabilities, persons of any sexual orientation, and persons of any gender identity or gender expression.

In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents.

Accommodations are available for applicants with disabilities throughout the recruitment process. If you require accommodations for interviews or other meetings, please contact <a href="mailto:facultypositions@ivey.ca">facultypositions@ivey.ca</a>.

# **ANNOUNCEMENTS**

# It's time to renew your CORS membership

The CORS website is ready to accept payment of membership fees for the upcoming year: **April 1, 2018 to March 31, 2019**. You may be able to use an NSERC grant to pay CORS membership dues. Please renew your membership by following this link: <a href="http://www.cors.ca/sites/cors">http://www.cors.ca/sites/cors</a> php/en/membership/renewal.php

If you have any questions, please contact Membership Services at membershipservices@cors.ca



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# Faculty Position in the Grado Department of Industrial and Systems Engineering Virginia Tech – Assistant Professor, Stochastic Operations Research

The Grado Department of Industrial and Systems Engineering (ISE) at Virginia Tech invites applications for a tenure-track faculty position at the rank of Assistant Professor, effective August 2018. We seek outstanding candidates in all areas of *Stochastic Processes* and more generally in *Stochastic Operations Research*. Candidates will have the opportunity to work with a wide range of research groups and faculty within the Department, College, and University, including those working in the areas of data analytics, simulation methodology, stochastic and/or simulation optimization, stochastic queueing and queueing networks, decision sciences, health systems and technology, medicine, telecommunications, financial engineering, and intelligent infrastructure, among others.

The ISE Department is comprised of 30 full-time faculty with approximately 550 undergraduate students, 170 master's students, and 90 doctoral students. The undergraduate and graduate ISE programs are currently ranked eighth and sixth, respectively, by U.S. News & World Report. Additional information about the department can be found at <a href="https://www.ise.vt.edu">www.ise.vt.edu</a>.

Candidates are expected to lead innovative and high-quality research, build a strong sponsored-research program, develop and teach graduate and undergraduate courses in ISE, and advise and mentor graduate and undergraduate students. The position requires a Ph.D. in industrial and systems engineering, operations research, or a closely related field. Preferred qualifications include demonstrated experience with interdisciplinary teaching or research in areas that align with existing departmental research strengths and with Virginia Tech's university-wide, multidisciplinary focus on Data and Decisions.

In addition to collaborating with faculty in ISE, the successful candidate will have the opportunity to engage in transdisciplinary research, curriculum, and outreach initiatives with other university faculty members working in the university's Data and Decisions Destination Area

(https://provost.vt.edu/destination-areas.html). The Data and Decisions Destination Area is focused on advancing the human condition and society with better decisions through data. Faculty working together in this area are integrating data analytics and decision sciences across the transdisciplinary research and curriculum efforts at Virginia Tech and beyond.

Interested individuals should apply online at jobs.vt.edu (posting number TR0170184). Candidates should submit a cover letter, current CV, research statement, teaching statement, three relevant research publications, and the names of at least three references. Review of applications will begin immediately, and the deadline for ensuring full consideration is December 31, 2017. The position will remain open, and applications may be considered until the position is filled. For more information or for any questions about the search, please contact the Search Committee at (ise-search@vt.edu). Applicants interested in meeting with a faculty member at the Winter Simulation 2017 Conference should contact the Search Committee at (isesearch@vt.edu). Applicants are also encouraged to include in their cover letter a list of any presentations they have at this conference.

Virginia Tech is committed to a culturally and ethnically diverse campus environment and to principles that promote inclusive practices. Virginia Tech does not discriminate against employees, students, or applicants on the basis of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, or veteran status. Virginia Tech is the recipient of a National Science Foundation ADVANCE Institutional Transformation Award to increase the participation of women in academic science and engineering careers. The ISE Department strongly supports the Virginia Tech Principles of Community.



# **MEETINGS AND CONFERENCES**

# **CORS Business Meetings**

CORS Council Meeting, Quebec City, QC
CORS Council Meeting, Teleconference
CORS Council Meeting, Teleconference
CORS Council Meeting, Toronto, ON
CORS Council Meeting, Teleconference
CORS Financial Planning Committee Meeting
CORS Council Meeting, Teleconference
CORS Council Meeting, Halifax, NS
CORS Council Meeting, Halifax, NS
CORS Annual General Meeting, Halifax, NS

#### **CORS Annual Conferences**

June 4–6, 2018 CORS Annual Conference, Halifax, NS https://eventspe.com/cors2018/index

# **WWW Conference Listings**

CORS Conference Page: www.cors.ca/?q=content/cors-annual-conferences INFORMS Conference Home Page: www.informs.org/attend-a-conference

IFORS Conferences: www.ifors.org/web

Netlib Conferences Database: ftp://ftp.cc.ac.cn/netlib/confdb/Conferences.html

SIAM Conference Home Page: www.siam.org/meetings/calendar.php

POMS Conference Page: www.poms.org/conferences

EURO Conferences: www.euro-online.org/web/pages/460/calendar



# THE NEXT ISSUE

The next issue of the Bulletin is scheduled to appear in **February**. Along with the regular features and news from the local sections, it will include more information about the next CORS conference. Contributions to this issue, especially news on the activities of local sections or CORS members, should be submitted by **January 19, 2018** to:

Andrea Friars
Editor, CORS Bulletin
11 Sawgrass Drive
Oakfield, NS B2T 0G1

Phone: 902-895-8430 ext. 3236 Email: AndreaFriars@gmail.com

The preferred method of submission is by an MS-Word attachment to an email.

#### CORS BULLETIN TRANSLATION POLICY

Items that are CORS business will be translated into English and French. All other items will be published in the language they are submitted in.

#### CORS BULLETIN ADVERTISING POLICY

Ads cost \$120 per page, proportional for fractional pages. Logos and prepared layouts can be accommodated. This fee also includes distribution of the advertisement on the CORS ListServ. Direct inquiries to the Editor.

#### **CORS LISTSERV**

As a benefit of membership, members may use the CORS ListServ to transmit messages, announcements, and job postings to the entire membership or to a targeted subgroup such as a local section. For example, you can send

- messages regarding the activities and business of the society;
- announcements about conferences, conference sessions, special journal issues, seminars or other activities provided that these are related to operational research in its broadest sense;
- job postings of general interest to CORS members.

The ListServ is not used for commercial purposes, and all messages are vetted before they are sent out. To submit items to the ListServ, email CORS Membership Services at membershipservices@cors.ca

For non-members, a fee of \$60 is charged for the distribution of job postings and other announcements or messages of interest to the CORS membership.



The **Canadian Operational Research Society** was founded in 1958. Its goal is to advance the theory and practice of OR and to stimulate and promote contacts between people interested in the subject.

**Publications**: A quarterly scientific journal called *INFOR* and a news *Bulletin*.

**Meetings**: An annual national conference with an award ceremony, occasionally organized jointly with an international society (IFORS, INFORMS), and numerous local events organized by local sections.

**Local Sections & Chapters**: CORS has twelve local sections located throughout Canada and four student chapters.

**Awards and Prizes**: CORS presents the following annual awards and prizes at its annual conference:

**Award of Merit** for significant contributions of a present or past member of CORS to the profession of OR.

**Harold Larnder Award** to an individual who has achieved international distinction in OR. **Omond Solandt Award** to an organization, private or governmental, that is deemed to have made an outstanding contribution to OR in Canada.

**Practice Prize** for the challenging application of the OR approach to the solution of applied problems.

**Service Award** for outstanding contributions of time and service to the society. **Student Paper Competition** to recognize the contribution of a paper either directly to the field of OR through the development of methodology or to another field through the application of OR.

**Graduate Student Funding**: CORS encourages attendance of graduate students at its annual conference by providing partial funding. Visit CORS website for details.

**CORS Diploma**: This diploma is awarded to students graduating from a university curriculum comprising several OR courses. Criteria may be found on the CORS website.

**Membership Directory**: An online directory of CORS members is available as a membership benefit.

**To join CORS:** Go to the CORS website and join online by credit card using the form found under membership or complete the PDF application form found on the CORS website and mail it with payment to the address below.

**Fees**: Member \$110; Retired Member \$55; Student Member \$45 (including post-doctoral fellows)

Website: www.cors.ca

LinkedIn: www.linkedin.com/company/canadian-operational-research-society