

J. Christopher Beck, PhD, LEL

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Education

University of Toronto

PhD, Computer Science, 1999.

MSc, Computer Science, 1994.

St. Francis Xavier University

BSc, Computer Science, 1992.

Employment

University of Toronto

Department of Mechanical & Industrial Engineering

Professor, 2015 – present.

Associate Chair Research, 2012 – 2015.

Associate Professor, 2009 – 2015.

Assistant Professor, 2004 – 2009.

With cross-appointment to the Department of Computer Science.

King's College London

Department of Informatics

Visiting Professor, 2017 – 2018.

Zuse Institute Berlin

Sabbatical Visitor, 2010 – 2011.

University College Cork

Cork Constraint Computation Center

Staff Scientist, 2002 – 2004.

ILOG, SA

Senior Scientist and Software Engineer, 1999 – 2002.

Numetrix, Inc

Software Engineer, 1994 – 1995.

Publications

134 peer-reviewed papers in journals and conferences.

5 conference proceedings edited or co-edited.

Google Scholar Citations: 4470, h-index: 33.

See tidel.mie.utoronto.ca/publications.php.

Scholarly Addresses Over 200 national and international presentations since 2000.

Research Funding Over CAD\$2.5M as PI, co-PI, or collaborator since 2003.

Awards **Distinguished Paper Award, 2018**
Fifteenth International Conference on the Integration of Constraint Programming, Artificial Intelligence, and Operations Research for *Intruder Alert! Optimization Models for Solving the Mobile Robot Graph-Clear Problem*.

Distinguished Student Paper Award, 2016
Twenty-Second International Conference on the Principles and Practice of Constraint Programming for *A Constraint Programming Approach to Multi-Robot Task Allocation and Scheduling in Retirement Homes*.

Google Research Award, 2011 – 2012

Outstanding Program Committee Member, 2010
Twenty-Fourth AAAI Conference on Artificial Intelligence.

Award of Excellence, 2009
Third International Competition on Knowledge Engineering for Planning and Scheduling for *From Requirements and Analysis to PDDL in itsSIMPLE3.0*.

Early Researcher Award, 2007
Ontario Ministry of Research and Innovation.

Rob Milne Memorial Award, 2006
Best Refereed Application Paper at the Twenty-Sixth International Conference of the British Computer Society's Specialist Group on Artificial Intelligence for *Managing Restaurant Tables Using Constraints*.

PLANET Prize for Research Excellence, 2001
European Conference on Planning for *Toward an Understanding of Local Search Cost in Job Shop Scheduling*.

Centennial Scholarship, 1992 – 1996
Natural Sciences and Engineering Research Council of Canada.

Governor-General's Gold Medal, 1992
St. Francis Xavier University.

Selected
Professional
Activities

**Executive Council for the
International Conference on Automated Planning and Scheduling**
President, 2014 – 2016.
President-Elect, 2012 – 2014.
Conference Liaison, 2010 – 2012.
Member, 2008 – 2016.

INFORMS Computing Society Prize Committee
Chair, 2015.
Member, 2012 – 2015.

Grant Referee

Natural Sciences and Engineering Research Council of Canada, 2000 – 2019.
Canada Excellence Research Chair Program, 2018.
Netherlands Organization for Scientific Research, 2006, 2018.
Canada 150 Research Chair Program, 2017.
Israel Science Foundation, 2008, 2009, 2017.
Austrian Science Fund, 2015.
Swiss National Science Foundation, 2014.
German-Israeli Foundation for Scientific Research and Development, 2012.
Microsoft Research PhD Scholarship Program, 2007.
Chilean National Commission for Scientific and Technological Research, 2007.

External Review Committee

United Arab Emirates Commission for Academic Accreditation, 2013, 2017, 2019.
NSERC Industrial Research Chairs Program, 2016.

Editorial Roles

Mathematical Programming Glossary, Editorial Board, 2009 – present.
Journal of Artificial Intelligence Research, Associate Editor, 2010 – 2016.
Knowledge Engineering Review, Editorial Board, 2005 – 2015.
Constraints, Letters Editor 2010 – 2013, Editorial Board, 2008 – 2013.
 Special Issue Co-editor, **18**(2), 2013.
 Special Issue Co-editor, **5**(4), 2000.
Journal of Scheduling, Associate Editor, 2005 – 2012.
Annals of Operations Research, Special Issue Co-editor, **171**(1), 2009.
Constraint Programming Letters, Area Editor, Editorial Board, 2006 – 2008.
AI Communications, Special Issue Co-editor, **20**(3), 2007.

Reviewer

29 journals, multiple reviews, 2000 – present.

Selected Conference Organization **International Conference on Automated Planning and Scheduling**
Program Co-chair, 2008, 2020.
(Senior) Program Committee, 2004 – 2020.

International Conference on the Integration of Constraint Programming, Artificial Intelligence, and Operations Research
Program Co-Chair, 2006, 2011.
Program Committee, 2004 – 2019.

International Conference on the Principles and Practice of Constraint Programming
Program Chair, 2017.
(Senior) Program Committee, 2007, 2012 – 2019.

**Association for the Advancement of Artificial Intelligence
AAAI Conference**
Area Chair, 2019.
(Senior) Program Committee, 2006 – 2008, 2010, 2015.

International Joint Conference on Artificial Intelligence
Program Committee, 2019.

Symposium on Abstraction, Reformulation, and Approximation
Co-Chair, 2009.
Program Committee, 2005 – 2011.

Teaching Current & Previous **Post-Doctoral Fellows**
4 supervised, 4 co-supervised.

Students
PhD, 7 supervised, 10 co-supervised.
MAsc/MSc, 8 supervised, 10 co-supervised.
MEng, 5 supervised (project).
BAsc, 14 supervised (thesis), 17 supervised (internship),
31 supervised (capstone project).

Courses
MIE1619, Constraint Programming and Hybrid Optimization, 2019.
MIE1619, Constraint Programming and Local Search, 2006 – 2010, 2012, 2014, 2016.
MIE562, Scheduling, 2005 – 2009, 2011 – 2016, 2018.
APS106, Fundamentals of Computer Programming, 2010, 2012, 2015 – 2017, 2019.
MIE350, Design and Analysis of Information Systems, 2004 – 2008.