

James R. Wright

Assistant Professor
Department of Computing Science
University of Alberta
Edmonton, Alberta
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Academic Employment

2018–present Assistant Professor
Department of Computing Science
University of Alberta, Edmonton, Alberta.

2016–2018 Postdoctoral Researcher
Microsoft Research, New York, NY.

2015 Visiting Graduate Student
Simons Institute for the Theory of Computing
University of California, Berkeley, CA.

Education

2010–2016 Doctor of Philosophy (Computer Science)
Dissertation: **Modeling Human Behavior in Strategic Settings.**
ACM SIGecom Doctoral Dissertation Award (Honorable Mention)
University of British Columbia, Canada

2007–2010 Master of Science (Computer Science)
Thesis: **Beyond Equilibrium: Predicting Human Behaviour in Normal Form Games**
University of British Columbia, Canada

1995–2000 Bachelor of Science (Computing Science)
Simon Fraser University, Canada

Publications

Journals

1. **Incentivizing Evaluation with Peer Prediction and Limited Access to Ground Truth**
Xi Alice Gao, James R. Wright, and Kevin Leyton-Brown.
Artificial Intelligence 275, 2019.
(supersedes Gao, Wright, and Leyton-Brown [2016])
2. **Learning When to Stop Searching.**
Daniel G. Goldstein, R. Preston McAfee, Siddarth Suri, and James R. Wright.
Management Science 66:3, pages 1375–1394, March 2020.
(Full version of Goldstein et al. [2017])
3. **Level-0 Models for Predicting Human Behavior in Games.**
James R. Wright and Kevin Leyton-Brown.

Journal of Artificial Intelligence Research, Volume 64, pages 357–383, February 2019.
(supersedes Wright & Leyton-Brown [2014])

4. **Predicting Human Behavior in Unrepeated, Simultaneous-Move Games.**

James R. Wright and Kevin Leyton-Brown.

Games and Economic Behavior, Volume 106, pages 16–37, November 2017.

(supersedes Wright & Leyton-Brown [2010, 2012])

Peer-Reviewed Conferences

1. **Alternative Function Approximation Parameterizations for Solving Games: An Analysis of f -Regression Counterfactual Regret Minimization.**

Ryan D’Orazio, Dustin Morrill, James R. Wright, and Michael Bowling.

AAMAS 2020: 19th International Conference on Autonomous Agents and Multiagent Systems, 2020.

2. **Learning in the Repeated Secretary Problem.**

Daniel G. Goldstein, R. Preston McAfee, Siddarth Suri, and James R. Wright.

EC-17: ACM Conference on Economics and Computation, 2017.

(Abstract)

3. **Deep Learning for Predicting Human Strategic Behavior.**

Jason Hartford, James R. Wright, and Kevin Leyton-Brown.

NIPS 2016: Thirtieth Annual Conference on Neural Information Processing Systems, 2016.

Oral presentation.

4. **Mechanical TA: Partially Automated High-Stakes Peer Grading.**

James R. Wright, Chris Thornton, and Kevin Leyton-Brown.

SIGCSE-15: ACM Technical Symposium on Computer Science Education, pages 96–101, 2015.

5. **Level-0 Meta-Models for Predicting Human Behavior in Games.**

James R. Wright and Kevin Leyton-Brown.

EC-14: ACM Conference on Economics and Computation, pages 857–874, 2014.

6. **Behavioral Game-Theoretic Models: A Bayesian Framework For Parameter Analysis.**

James R. Wright and Kevin Leyton-Brown.

AAMAS-2012: International Conference on Autonomous Agents and Multiagent Systems, pages 921–928, 2012.

Best student paper (runner up).

7. **Beyond Equilibrium: Predicting Human Behavior in Normal Form Games.**

James R. Wright and Kevin Leyton-Brown.

AAAI-10: AAAI Conference on Artificial Intelligence, pages 901–907, 2010.

Working Papers

1. **Cross Domain Generalization of Human Perceptions of Fairness in Algorithmic Decision Making.**

Michele Albach and James R. Wright.

2. **A Formal Separation Between Strategic and Nonstrategic Behavior**

James R. Wright and Kevin Leyton-Brown.

Other Venues

1. **Bounds for Approximate Regret-Matching Algorithms.**

Ryan D’Orazio, Dustin Morrill, James R. Wright.

Bridging Game Theory and Deep Learning Workshop at NeurIPS, 2019.

2. **A Formal Separation Between Strategic and Nonstrategic Behavior.**

James R. Wright and Kevin Leyton-Brown.

Workshop on Behavioral EC at ACM Conference on Economics and Computation, 2019.

3. **Incentivizing Evaluation via Limited Access to Ground Truth: Peer-Prediction Makes Things Worse.**

Xi Alice Gao, James R. Wright, and Kevin Leyton-Brown.

Workshop on Algorithmic Game Theory and Data Science at ACM Conference on Economics and Computation, 2016.

4. **Linear Solvers for Nonlinear Games: Using Pivoting Algorithms to Find Nash Equilibria in n -Player Games.**

James R. Wright, Albert Xin Jiang, and Kevin Leyton-Brown.

SIGecom Exchanges, volume 10, number 1, pages 9–12, 2011.

Invited Talks

DLRLSS-2019

Multiagent Systems.

At Deep Learning & Reinforcement Learning Summer School.

Edmonton, Alberta. 2019.

Choice-2019

Algorithmic Behavioral Modeling.

At 11th Triennial Invitational Choice Symposium.

Chesapeake Bay, Maryland. 2019.

PGT-2018

Predicting Human Strategic Behavior: From Behavioral Economics to Deep Learning.

At Workshop on Predictive Game Theory,

Evanston, Illinois. 2018.

YoungEC’17

Algorithmic Modeling of Human Behavior.

At Young Researcher Workshop on Economics and Computation,

Tel Aviv, Israel. 2017.

INFORMS-2017

Deep Learning for Human Strategic Modeling.

At INFORMS Annual Meeting,

Houston, Texas. 2017.

IFORS-2017

Deep Learning for Human Strategic Modeling.

At 21st Conference of the International Federation of Operations Research Societies,

Québec City, Québec. 2017.

- ISMP-2015 **Level-0 Meta-Models for Predicting Human Behavior in Games.**
At 22nd International Symposium on Mathematical Programming,
Pittsburgh, Pennsylvania. 2015.
- SFI **Evaluating Set-Valued Predictions.**
At Combining Information Theory and Game Theory,
Santa Fe Institute, New Mexico. 2012.
- LANL **Beyond Equilibrium: Predicting Human Behavior in Normal
Form Games.**
*At Design and Control of Systems of Goal-Directed Agents; From Game
Theory to Game Engineering,*
Los Alamos National Laboratory, New Mexico. 2010.
- BQGT **Beyond Equilibrium: Predicting Human Behavior in Normal
Form Games.**
*At Behavioral and Quantitative Game Theory Conference on Future
Directions,*
Newport Beach, California. 2010.

Funding

- 2019–2025 **NSERC Discovery Grant**
Natural Sciences and Engineering Research Council of Canada
(Total value: \$195,000)
- 2019–2020 **NSERC Discovery Launch Supplement**
Natural Sciences and Engineering Research Council of Canada
(Total value: \$12,500)
- 2019–2020 **Amii Resource Allocation Panel**
Alberta Machine Intelligence Institute
(Total value: \$78,860)
- 2018–2023 **Canada CIFAR AI Chair**
Canadian Institute for Advanced Research
(Total value: \$500,000)
- 2018 **NVIDIA GPU Grant**
NVIDIA Corporation *(Donation value in CAD: \$1,512)*

Awards

- 2017 **Honorable Mention: ACM SIGecom Doctoral Dissertation Award**
ACM Special Interest Group on E-commerce
- 2010–2013 **UGF: University Graduate Fellowship**
University of British Columbia, Canada
Declined in 2010–2012 to hold NSERC
(Total value: \$80,000)
- 2010–2012 **NSERC Canada Graduate Scholarship (Ph.D.)**
Natural Sciences and Engineering Research Council of Canada
(Total value: \$105,000)

2008–2009 **NSERC Canada Graduate Scholarship (M.Sc.)**
 Natural Sciences and Engineering Research Council of Canada
(Total value: \$17,500)

Graduate Students Supervised

2020– Niko Yasui (PhD)
 2019– Greg d’Eon (PhD, co-supervised with Kevin Leyton-Brown)
 2019– Michele Albach (MSc)
 2019– Daniel Chui (MSc)
 2019– Ryan D’Orazio (MSc, co-supervised with Matt Taylor)

Supervisory / Examination Committees

2020 Niko Yasui (MSc)
 2019– Trevor David (PhD)
 2019– Adam Parker (PhD)
 2019– Negar Hassanpour (PhD)
 2018– Craig Sherstan (PhD)
 2018 Marius Stanescu (PhD)

External Examination Committees

2018 Moshe Mash (PhD, Ben Gurion)

Service

2020 Program Co-chair: Graduate Student Symposium (at 33rd Canadian
 Conference on Artificial Intelligence)
 2019 Program Committee: Deep Learning & Reinforcement Learning Sum-
 mer School
 2017 Co-organizer: 2017 New York Computer Science and Economics Day
 (NYCE Day)
 2015–2017 Member: NSF PI Forum on Peer Assessment
 2014–2015 Student representative: Faculty Recruiting Committee

Senior Program Committees

2020 21st ACM Conference on Economics and Computation.
 2019 20th ACM Conference on Economics and Computation.

Program Committees

2020 International Conference on Autonomous Agents and Multi-Agent Sys-
 tems 2020.

2020	The Web Conference 2020.
2019	Thirty-Fourth AAAI Conference on Artificial Intelligence.
2019	AAAI-20 Workshop on Reinforcement Learning in Games.
2019	36th International Conference on Machine Learning.
2019	Seventh AAAI Conference on Human Computation and Crowdsourcing.
2018	The Web Conference 2019.
2018	Thirty-Third AAAI Conference on Artificial Intelligence.
2018	AAAI-19 Workshop on Reinforcement Learning in Games.
2018	19th ACM Conference on Economics and Computation.
2017	27th International World Wide Web Conference.
2017	Thirty-Second AAAI Conference on Artificial Intelligence.
2017	18th ACM Conference on Economics and Computation.
2016	Thirty-First AAAI Conference on Artificial Intelligence.

Journal Reviews

I have reviewed for various journals without serving on an editorial board. These include American Economic Review, Artificial Intelligence Journal, Journal of Artificial Intelligence Research, Journal of Autonomous Agents and Multi-Agent Systems, Econometrica, Journal of Economic Behavior and Organization, Games and Economic Behavior, Journal of Machine Learning Research, ACM Transactions on Economics and Computation.

Conference Reviews

I have reviewed for various conferences without serving on a program committee. These include NeurIPS, SODA, WINE, IJCAI.

Teaching

My duties as an instructional assistant for the various massively open online courses listed below included constructing new content (problem sets and exams), cross-checking new video content for slide typos and misstatements, and monitoring and responding to student questions in online forums.

As an instructional assistant for Computers and Society, I led the design and implementation effort of the Mechanical TA peer grading system. I also constructed exams, and assisted with curriculum development.

As a teaching assistant for Multiagent Systems, I constructed quizzes, exams, and assignments, and assisted in the day-to-day operation of the class.

2020	Assistant Professor, University of Alberta Intelligent Systems (undergraduates).
2020	Assistant Professor, University of Alberta Modelling Human Strategic Behaviour (graduates).

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- 2019 Assistant Professor, University of Alberta
Modelling Human Strategic Behaviour (graduates).
- 2019 Assistant Professor, University of Alberta
Intelligent Systems (undergraduates).
- 2014 Instructional Assistant, Coursera/University of British Columbia
Game Theory II (Massively Open Online Course), Kevin Leyton-Brown.
- 2014 Instructional Assistant, Coursera/University of British Columbia
Game Theory (Massively Open Online Course), Kevin Leyton-Brown.
- 2014 Teaching Assistant, University of British Columbia
Multiagent Systems (graduates), Kevin Leyton-Brown.
- 2014 Instructional Assistant, University of British Columbia
Computers and Society (advanced undergraduates), Kevin Leyton-Brown.
- 2013 Instructional Assistant, University of British Columbia
Game Theory II (Massively Open Online Course), Kevin Leyton-Brown.
- 2013 (twice) Instructional Assistant, Coursera/University of British Columbia
Game Theory (Massively Open Online Course), Kevin Leyton-Brown.
- 2013 Teaching Assistant, University of British Columbia
Multiagent Systems (graduates), Kevin Leyton-Brown.
- 2013 Instructional Assistant, University of British Columbia
Computers and Society (advanced undergraduates), Kevin Leyton-Brown.
- 2009 Teaching Assistant, University of British Columbia
Multiagent Systems (graduates), Kevin Leyton-Brown.
- 2008 Teaching Assistant, University of British Columbia
Computers and Society (advanced undergraduates), Kurt Eiselt.
- 2007 Teaching Assistant, University of British Columbia
Advanced Software Engineering (advanced undergraduates), Eric Wohlstadter.

Last update: March 13, 2020