

# Ashton Anderson

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## EMPLOYMENT

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- University of Toronto**, Toronto, ON, Canada 2017–present  
Assistant Professor, Department of Computer Science.  
Faculty Affiliate, Vector Institute for Artificial Intelligence.  
Research Fellow, Behavioural Economics in Action at Rotman.
- Microsoft Research**, New York, NY, USA 2015–2017  
Postdoctoral Researcher, Computational Social Science group

## EDUCATION

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- Stanford University**, Stanford, CA, USA 2010–2015  
Ph.D. in Computer Science.  
*Advisor*: Jure Leskovec.
- Stanford University**, Stanford, CA, USA 2008–2010  
M.S. in Computer Science.  
*Advisor*: Yoav Shoham. *Specialization*: Algorithmic game theory.
- McGill University**, Montreal, Canada 2004–2008  
B. Eng. in Software Engineering (with distinction).

## SELECTED AWARDS AND HONORS

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- Invited to “Best Papers of KDD 2016” TKDD Special Issue  
Keynote Speaker at WIN 2015  
Best paper runner-up at WWW2014  
Google Ph.D. Fellowship in Social Computing (with third-year extension), 2012–2015  
NSERC Postgraduate Scholarship M, 2008–2010

## SELECTED PAPERS

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- Personal Bests as Reference Points.  
A. Anderson, E. Green.  
*Proceedings of the National Academy of Sciences (PNAS)*, 2018
- Understanding the Origins of Bias in Word Embeddings, 2018.  
M. Brunet, C. Alkalay-Houlihan, A. Anderson, R. Zemel.  
*Under review*, 2018
- How Constraints Affect Content: The Case of Twitter’s Switch from 140 to 280 Characters.  
K. Gligoric, A. Anderson, R. West.  
*Proceedings of the International Conference on the Web and Social Media (ICWSM)*, 2018
- Mapping the Invocation Structure of Online Political Interaction.  
M. Raghavan, A. Anderson, J. Kleinberg.  
*Proceedings of the 27th International Conference on the World Wide Web (WWW)*, 2018
- Auditing Search Engines for Demographic Bias in Performance.  
R. Mehrotra, A. Anderson, F. Diaz, A. Sharma, H. Wallach, E. Yilmaz.  
*Proceedings of the 26th International Conference on the World Wide Web (WWW)*, 2017

Assessing Human Error Against a Benchmark of Perfection.

A. Anderson, J. Kleinberg, S. Mullainathan.

*ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD)*, 2016

**Invited and accepted to TKDD Special Issue on “Best Papers of KDD 2016”**

Exploring limits to prediction in complex social systems.

T. Martin, J. Hofman, A. Sharma, A. Anderson, and D. Watts.

*Proceedings of the 25th International Conference on the World Wide Web (WWW)*, 2016

Global Diffusion via Cascading Invitations: Structure, Growth, and Homophily.

A. Anderson, D. Huttenlocher, J. Kleinberg, J. Leskovec, and M. Tiwari.

*Proceedings of the 24th International Conference on the World Wide Web (WWW)*, 2015

The Structural Virality of Online Diffusion.

S. Goel, A. Anderson, J. Hofman, and D. Watts.

*Management Science*, 2015

Engaging with Massive Online Courses.

A. Anderson, D. Huttenlocher, J. Kleinberg, and J. Leskovec.

*Proceedings of the 23rd International Conference on the World Wide Web (WWW)*, 2014

**Best paper runner-up**

The Dynamics of Repeat Consumption.

A. Anderson, R. Kumar, A. Tomkins, and S. Vassilvitskii.

*Proceedings of the 23rd International Conference on the World Wide Web (WWW)*, 2014

Steering User Behavior With Badges.

A. Anderson, D. Huttenlocher, J. Kleinberg, and J. Leskovec.

*Proceedings of the 22nd International Conference on the World Wide Web (WWW)*, 2013

Discovering Value from Community Activity on Focused Question Answering Sites: A Case Study of Stack Overflow.

A. Anderson, D. Huttenlocher, J. Kleinberg, and J. Leskovec.

*ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD)*, 2012

Effects of User Similarity in Social Media.

A. Anderson, D. Huttenlocher, J. Kleinberg, and J. Leskovec.

*ACM International Conference on Web Search and Data Mining (WSDM)*, 2012

## COMMUNITY SERVICE

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Reviewer for *WWW 2013*, *IJCAI 2013*, *WSDM 2014*, *Communications of the ACM (CACM)*, *Journal of Artificial Intelligence Research (JAIR)*, *Transactions on the Web (TWEB)*, *Transactions on Economics and Computation (TEAC)*, *Transactions on Knowledge and Data Engineering (TKDE)*

PC member for *KDD 2014*, *ICWSM 2016*, *IJCAI 2016*, *KDD2016*, *WSDM 2016*, *ICWSM2017*, *WSDM2017*, *WWW2017*, *WWW2018*, *WWW2019*

## INDUSTRIAL EXPERIENCE

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**Spotify**, London, England

**2018**

*Research contractor* with Tech Research.

**Microsoft Research**, New York City, USA

**2015–2017**

*Postdoctoral Fellow* in the Computational Social Science group.

**LinkedIn**, Mountain View, CA, USA

**2013–2015**

*Research contractor* under Deepak Agarwal.

**Facebook Core Data Science**, Menlo Park, CA, USA

**Summer 2014**

*Research Intern* under Lada Adamic.

<b>Google</b> , Mountain View, CA, USA <i>Research Intern</i> under Andrew Tomkins.	<b>Summer 2013</b>
<b>Microsoft Research</b> , New York City, NY, USA <i>Research Intern</i> under Sharad Goel.	<b>Summer 2012</b>
<b>Yahoo! Research</b> , New York City, NY, USA <i>Research Intern</i> under Duncan Watts.	<b>Summer 2011</b>

## GRANTS

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\$204,000 Research Grant — Canada Foundation for Innovation <i>Computational Social Science Lab</i>	<b>2018–2023</b>
\$165,000 Research Grant — National Science and Engineering Research Council <i>Behavioural Computation: Analysis, Models, and Algorithms for Supporting Human Improvement on the Web</i>	<b>2018–2023</b>

## TEACHING

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Social and Information Networks (CSCC46) <i>Third-year undergraduate course</i>	<b>2017–2018</b>
Topics in Computational Social Science (CSC2552) <i>Graduate seminar</i>	<b>2018–2019</b>

## STUDENT ADVISING

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### *PhD:*

- Reid McIlroy-Young, 2018–
- Lillio Mok, 2018–

### *Master's:*

- Marc-Etienne Brunet, 2017–
- George Lifchits, 2018–
- Irene Jiang, 2017–2018
- Aditya Subramanian, 2018–

### *Undergraduate:*

- Shunzhe (Luffy) Yu, 2017–2018
- Inioluwa Raji, 2018–
- Isaac Waller, 2017–

## PATENT

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### **Recommending candidates for consumption.**

Sergei Vassilvitskii, Andrew Tomkins, Shanmugasundaram Ravikumar, Ashton Anderson.  
*US Patent 9,471,572*, 2016.