# Alex P. Miller

#### CURRICULUM VITAE

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# **EDUCATION**

## The Wharton School, University of Pennsylvania

Doctoral Candidate in Operations, Information, & Decisions Concentration: Information Systems & Technology Advisor: Kartik Hosanagar Philadelphia, PA; 2015 – Present



#### Clark Honors College, University of Oregon

Bachelor of Arts, Mathematics, summa cum laude,  $\Phi {\rm BK}$  Eugene, OR; 2008-2012



# RESEARCH INTERESTS

A/B testing, causal inference, machine learning, algorithmic decision making, and online recommendation systems

#### RESEARCH

### Working Papers:

- Improving Recommender Diversity with Probabilistic Item Selection
- An Empirical Analysis of E-commerce A/B Testing Practices

#### **Conference Presentations**

- Alex P. Miller & Kartik Hosanagar. "What's best to test? An empirical meta-analysis of e-commerce A/B testing practices". Conference on Data Science for Business and Economics at Purdue University. May 2018. West Lafayette, IN.
- Alex P. Miller. "Best Predictive Model Challenge". Applied Machine Learning Conference. April 2018. Charlottesville, VA.
- Kartik Hosanagar & **Alex P. Miller**. "Improving Recommender Diversity with Probabilistic Item Selection". Workshop on Information Systems & Technologies (WITS). December 2017. Seoul, Korea.
- Alex P. Miller & Kartik Hosanagar. "What's best to test? An empirical meta-analysis of e-commerce A/B testing practices". Conference on Digital Experimentation (CODE@MIT). October 2017. Cambridge, MA.

- Kartik Hosanagar & **Alex P. Miller**. "Improving Recommender Diversity with Probabilistic Item Selection". Conference on Information Systems & Technology (CIST). October 2017. Houston, TX.
- Alex P. Miller & Kartik Hosanagar. "Exploratory Meta-analysis of E-commerce A/B Testing Practices". Wharton Innovation Doctoral Symposium (WINDS). October 2017. Philadelphia, PA.
- Alex P. Miller "Does Data Kill Creativity? A Model of Innovation and Analytics in New Product Development". Wharton-INSEAD Doctoral Consortium. December 2016. Singapore.

#### **Publications**

• Kartik Hosanagar & **Alex P. Miller** "Who do we blame for the filter bubble? On the interaction between people, data, and algorithms in online social systems". Book Chapter. *After the Digital Tornado*. Forthcoming, 2018.

# HONORS & AWARDS

- Best Predictive Model at Applied Machine Learning Conference 2018
- Baker Retail Center Research Grant, 2017
- Mack Institute Research Fellowship, 2017
- Oregon Six (Phi Beta Kappa), 2012
- Undergraduate Research Fellowship, 2011

# SERVICE & LEADERSHIP

**Conference Board:** Wharton Innovation Doctoral Symposium 2018 **Session Chair:** Wharton Innovation Doctoral Symposium 2018

Reviewer: International Conference on Information Systems 2017, Wharton

Innovation Doctoral Symposium 2017-2018 **Web Chair**: Penn Open Labs 2017-2018

# TEACHING EXPERIENCE

- Instructor, Wharton Ph.D. Tech Camp, Summer 2017
- TA, Enabling Technologies OIDD 344/662, Spring 2017

## **WRITING**

- "Why do we care so much about explainable algorithms? In defense of the black box". 11 January 2018. *Towards Data Science*. Link. https://towardsdatascience.com/why-do-we-care-so-much-about-explainable-algorithms-in-defense-of-the-black-box-d9e3bc01e0dc
- "Are machines biased or are we biased against machines?". 24 May 2016.

  Towards Data Science. Link: https://towardsdatascience.com/are-machines-biased-or-are-we-biased-against-machines-17982310152b

# INDUSTRY EXPERIENCE

Research Intern – **Monetate Labs** Analytics Consultant – **Adpearance** Full Stack Developer, Data Scientist – **SmartyPal** Digital Marketing Specialist – **Adpearance**  April 2017 – Present April 2015 – April 2017 April 2014 – August 2015 October 2012 – April 2014