

# David Rockoff

Statistics GIDP  
The University of Arizona  
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## EDUCATION

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**Ph.D. in Statistics** (Minor: Educational Psychology), University of Arizona (anticipated 2016)  
Dissertation: "A Randomization Test for the Detection of Differential Item Functioning"  
Advisor: Nicole Kersting

**M.S. in Statistics**, Iowa State University (2010)  
Creative Component: "How Good is your Eyeballing?", an analysis of accuracy on elementary geometric tasks as they relate to the perception of statistical graphics.  
Major Professor: Heike Hofmann

## TEACHING EXPERIENCE

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**Graduate Teaching Associate (Instructor)**, University of Arizona Department of Mathematics

- Introduction to Statistics and Biostatistics (Fall 2011, Spring 2012, Fall 2013, Spring 2014, Summer 2014, Fall 2015)
- Basic Statistics (Spring 2015, Spring 2016)
- College Algebra (Fall 2010, Spring 2011, Summer 2013, Fall 2014, Summer 2015)
- College Algebra - New Start program (Summer 2011, Summer 2012)
- Applied College Algebra with Data Analysis (Fall 2012, Spring 2013)

**Teaching Assistant/Lab Instructor**, Iowa State University Department of Statistics

- Statistics for Social Sciences (Spring 2010)
- Introduction to Business Statistics II (Fall 2009)

## PUBLICATIONS

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**Rockoff, David M.** and Hofmann, Heike. (2011) "How Good is your Eyeballing?" *CHANCE* 24(2).

Hofmann, Heike; Cook, Dianne; et al. (2011) "Delayed, Canceled, on Time, Boarding... Flying in the USA," *Journal of Computational and Graphical Statistics* 20(2).

**Rockoff, David M.** and Yates, Philip A. (2011) "Joe DiMaggio Done It Again...and Again and Again and Again?" *CHANCE* 24(1).

Hobbs, Jon; Fostvedt, Luke; Pintar, Adam; **Rockoff, David M.**; Kim, Eunice; and Griffiths, Randy. (2010) "Fixed-Cost Versus Fixed-Risk Post-Election Audits in Iowa," *CHANCE* 23(3).

Kahn, Ari B., Zeeberg, Barry R., Liu, Hongfang; Ryan, Michael C., Jamison, D. Curtis; **Rockoff, David M.**, Pommier, Yves; and Weinstein, John N. (2010) "Ontogenomic Study of the Relationship between Number of Gene Splice Variants and GO Categorization," *Bioinformatics* 26(16):1945-1949. oi:10.1093/bioinformatics/btq335

**Rockoff, David M.** and Yates, Philip A. (2009) "Chasing DiMaggio: Streaks in Simulated Seasons Using Non-Constant At-Bats," *Journal of Quantitative Analysis in Sports* 5(2).

## AWARDS

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**Outstanding first-year student**, Statistics Graduate Interdisciplinary Program,  
University of Arizona (2011)

**First place, \$5000 award**, Design for America challenge,  
for visualization of the spending data from the American Recovery and Reinvestment Act of 2009.  
Iowa State Statistical Graphics Working Group (2010)

**Second place**, American Statistical Association Data Expo,  
for poster "Delayed, Cancelled, On-Time, Boarding ... Flying in the USA."  
Iowa State Statistical Graphics Working Group (2009)

## PRESENTATIONS

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"Statistics in the Community: Present and Future". Topic contributed panel.  
Joint Statistical Meetings (2010)

"How good is your eyeballing?" Contributed paper.  
Joint Statistical Meetings (2009)

### Co-authored:

"The Pros of Pro Bono Statistical Consulting". Invited panel.  
Joint Statistical Meetings (2009)

"The Statistics of Election Auditing". Topic contributed paper.  
Joint Statistical Meetings (2009)

## PRESENTED POSTERS

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"A Randomization Test for the Detection of Differential Item Functioning"  
University of Arizona Graduate Interdisciplinary Programs Annual Student Research Showcase (2015)

"Hitting Streaks in Seasons Using Non-Constant Batting Averages"  
New England Symposium on Statistics in Sports (2009)

"Statisticians Speak Out!", Topic contributed poster  
Joint Statistical Meetings (2009)

"How good is your eyeballing?"  
Iowa State University Department of Statistics 75<sup>th</sup> Anniversary conference (2009)

"Statisticians Speak Out!"  
Iowa State University Department of Statistics 75<sup>th</sup> Anniversary conference (2009)

"Chasing DiMaggio: Hitting Streaks in Seasons Using Non-Constant At-Bats"  
Northern California Symposium on Statistics and Operations Research in Sports (2008)

"STATCOM at Iowa State: Experiences and Projects in the First Year"  
Joint Statistical Meetings (2008)

## SERVICE AND PROFESSIONAL ACTIVITIES

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**Group Leader**, Math 392, Undergraduate Directed Research in Sports Analytics (2016)

**Presenter**, "This is Statistics" outreach effort to K-12 students in the Tucson area (2016)

**Narrator**, "Geometry in Context" (Joseph Thomas), video for graduate fellowship to create Common-Core-themed instructional films for high school geometry courses (2014)

**Research Mentor**, "The Early Negro Leagues and Major League Baseball: A Comparative Analysis" (Joseph Catallini), Honors College Undergraduate Thesis (2013)

**Executive Director**, StatCom at Arizona, a student-run statistical consulting group that provides pro bono services to local organizations (2010-present)

**Member**, American Statistical Association Committee on Pro Bono Statistics (2010-2011)

**Co-founder, Executive Committee member**, StatCom at Iowa State (2007-2010)

**Member**, Student/Faculty Committee on Instruction, Iowa State University Department of Statistics (2007-2009)

**Member**, International Committee, Iowa State University Department of Statistics (2008-2009)

## RESEARCH ASSISTANTSHIPS

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**Graduate Research Assistant**, University of Arizona Department of Mathematics

- Institute for Mathematics and Education (2013)

**Graduate Research Assistant**, Iowa State University Department of Statistics

- Iowa Workforce Development (2010)
- Iowa Department of Human Services (2006-2009)

## PROFESSIONAL AFFILIATIONS

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American Statistical Association

Institute for Mathematical Statistics

American Educational Research Association

Society for American Baseball Research

## RESEARCH INTERESTS

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Statistics education

Measurement

Data visualization

Survey methodology

Statistical applications in sports

## **EMPLOYMENT**

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**Monitoring and Evaluation Analyst**, Alexandria (VA) City Public Schools (2004-2006)

**Statistical Consultant/Tutor**, Self-employed (2004-2006)

**Statistician**, Aspen Systems Corporation (2000-2003)

**Mathematical Statistician**, U.S. Census Bureau (1999-2000)