

# Damon M. Bayer

+1 (605) 691 - 4244 • [✉ damon@damonbayer.com](mailto:damon@damonbayer.com)  
[🌐 iteratedexpectations.com](http://iteratedexpectations.com) • [in damonbayer](https://www.linkedin.com/in/damonbayer) • [🌐 damonbayer](https://github.com/damonbayer)

*PhD student in statistics with extensive research background involving applications in text data and methodological developments in model-based clustering. Rigorous graduate coursework including statistical computing and machine learning. Effective communication skills honed through conference presentations, study abroad experiences, and as a radio host.*

## Education

---

### University of California, Irvine

*Ph.D. Statistics,*

**Irvine, CA**

*2018–2023*

### South Dakota State University

*M.S. Statistics, 4.00/4.00*

**Brookings, SD**

*2016–2018*

Arnold K. Skeie E-Commerce Analytics Graduate Fellow (Jan. 2017–June 2018),  
Senator Thomas A. Daschle Student Fellow (May 2017–June 2017)

### South Dakota State University

*B.S. Mathematics, 3.94/4.00*

**Brookings, SD**

*2013–2016*

Honors College Distinction

Study abroad experiences in Manitoba, CA and Quito, EC

## Skills & Specialties

---

**Computing:** R, SAS,  $\LaTeX$ , Markdown

**Statistics:** Text Data, Clustering Methods, Data Visualization

**Coursework:** Statistical Computing, Modern Applied Statistics, Regression Analysis, Asymptotic Statistics, Predictive Analytics

## Publications

---

- [1] D. Bayer and S. Michael, “Variable selection techniques for clustering on the unit hypersphere,” *Submitted*, 2018.
- [2] D. Bayer, C. Neumann, and A. Ranadive, “Communication of statistically based conclusions to jurors—a pilot study,” *Journal of Forensic Identification*, vol. 66, no. 5, pp. 405–427, 2016.

## Poster Presentations

---

- [1] D. Bayer and S. Michael, “Variable selection methods for clustering with mixtures of von mises–fisher distributions,” in *SDSU Data Science Symposium*, Brookings, SD, Feb. 2018, Awarded third place overall.

- [2] —, “Topic modeling the daschle collection,” in *Daschle Scholars Meeting*, Brookings, SD, Oct. 2017, Private meeting with former Senate Majority Leader Thomas Daschle.
- [3] D. Bayer, “The 2016 presidential primary debates: A natural language processing analysis,” in *SDSU Undergraduate Research, Scholarship, and Creative Activity Day*, Brookings, SD, Apr. 2016, Awarded second place in Math, Engineering, and Physics.
- [4] D. Bayer and J. Hendricks, “Statistical interpretation of forensic evidence,” in *South Dakota Experimental Program to Stimulate Competitive Research*, Pierre, SD, Jul. 2015.
- [5] D. Bayer, “Improving the communication of forensic evidence to jurors: A pilot study,” in *SDSU Undergraduate Research, Scholarship, and Creative Activity Day*, Brookings, SD, Apr. 2015.

## Experience

---

### Statistics & Software

#### Query.AI

*Summer Intern*

**Brookings, SD**

*May 2018–July 2018*

- Researched and developed natural language understanding software for enterprise chatbot application built on DialogFlow and Rasa.
- Managed time and met deadlines while working remotely.

#### Daktronics, Inc.

*Software Quality Assurance Student*

**Brookings, SD**

*June 2013–Aug. 2013*

- Tested firmware and software of Daktronics products to document bugs.
- Wrote test cases to improve thoroughness and consistency of testing process.

### Consulting

#### Flandreau Indian School

**Flandreau, SD**

*July 2017*

- Analyzed data to assess success of absentee intervention program.

### Teaching

#### South Dakota State University

*Graduate Teaching Assistant*

**Brookings, SD**

*Aug. 2016–Dec. 2016*

- Led supplemental lab sections for Quantitative Literacy, College Algebra, and Pre-College Algebra courses.
- Graded homework and exams for Quantitative Literacy and other courses.

#### South Dakota State University

*Undergraduate Learning Assistant*

**Brookings, SD**

*Aug. 2015–May 2016*

- Tutored students in Pre-College Algebra, College Algebra, Trigonometry, Pre-Calculus, Calculus I, Calculus II, and Introduction to Statistics.
- Provided additional assistance to students in Pre-College Algebra classrooms.

### Additional

#### Iterated Expectations

*Writer*

*Aug. 2018–Present*

- Blogged about statistics and data science projects on my personal site [iteratedexpectations.com](http://iteratedexpectations.com).

### **KSDJ, KUCI, Independent**

*Radio/Podcast Host, Producer, and Engineered*

*Aug. 2014–Present*

- Created, 1-2 weekly programs each semester.
- Content included music discussion, interviews with academics, and coverage of the South Dakota Legislature with interviews with state politicians and activists.

### **SDSU IT Department**

*Student Technology Fellow*

**Brookings, SD**

*Aug. 2013–May 2016*

- Independently provided technical support to the College of Education and Human Sciences.
- Assisted with software and hardware deployment, virus removal, networking, and more.

### **SDSU Bookstore**

*HOBOTECH Sales Associate*

**Brookings, SD**

*June 2013–June 2014*

- Assisted customers in finding technology solutions to meet their needs.
- Achieved Apple Product Professional certification.

## **Service**

---

### **SDSU Data Science Symposium**

*Volunteer*

**Brookings, SD**

*Feb. 2018*

Chaired several sessions at the inaugural symposium.

## **Membership in Professional Societies**

---

**American Statistical Association:** Member

*2017–Present*

**Institute of Mathematical Statistics:** Member

*2017–Present*