AMELIA A. MCNAMARA

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RESEARCH INTERESTS

Statistical computing, statistics education, data visualization, reproducible research, spatial statistics

EDUCATION

Ph.D., Statistics   2015
University of California - Los Angeles   Los Angeles, CA
Dissertation: Bridging the Gap Between Tools for Learning and for Doing Statistics
Committee: Robert Gould and Fredrick Paik Schoenberg (co-chairs, statistics), Mark Handcock
(statistics), Todd Millstein (computer science), Alan Kay (computer science).

B.A., Mathematics and **English**   2010
Macalester College   St. Paul, MN

ACADEMIC APPOINTMENTS

Assistant Professor   2018-present
University of St Thomas Department of Computer & Information Sciences   St Paul, MN

Visiting Assistant Professor   2015-2018
Smith College Program in Statistical and Data Science   Northampton, MA
MassMutual Faculty Fellow

PEER-REVIEWED PUBLICATIONS

Schweinberg, M., Feldman, M., Staub, N., [175 additional coauthors, including ***McNamara, A.***], Uhlman, E. L. **Same data, different conclusions: Radical dispersion in empirical results when independent analysts operationalize and test the same hypothesis**. *Organizational Behavior and Human Decision Processes.* Vol. 165. (2021)

McNamara, A. **Key Attributes of a Modern Statistical Computing Tool.** *The American Statistician.* Vol. 73, Issue 4. (2019).

McNamara, A. **Community Engagement and Subgroup Meta-Knowledge: Some Factors in the Soul of a Community.** *Computational Statistics.* Vol. 34, Issue 4. (2019).

Rafalski, T., Uesback, P. M., Panks-Meloney, C., Daleiden, P., Allee, W., ***McNamara, A.*** and Stefik, A. **A Randomized Controlled Trial on the Wild Wild West of Scientific Computing with Student Learners.** *ICER'19 Proceedings* (2019).

Gould, R., Wild, C. J., Baglin, J., ***McNamara, A.***, Ridgway, J., McConway, K, "Revolutions in Teaching and Learning Statistics: A Collection of Reflections" in *Springer International Handbook of Research in Statistics Education* (Ben-Zvi, D., Makar, K., eds), Springer International Handbook of Education series. (2018).

McNamara, A., and Horton, N. J. **Wrangling Categorical Data in R.**
Special issue, jointly published in Practical Data Science for Stats, *PeerJ Preprint* Collection, 5:e3163v2 (2017) and *The American Statistician.* Vol. 72, Issue 1. (2017).

Catllá, A.J., ***McNamara, A.*** and Topaz, C. M. **Instabilities and Patterns in Coupled Reaction-Diffusion Layers.** *Physical Review E,* Vol. 85, Issue 2. (2012).

OTHER WRITING

McNamara, A. **Data visualisation by hand: drawing data for your next story** (blog post). `https://datajournalism.com/read/longreads/data-visualisation-by-hand` (24 March, 2021).

McNamara, A. **Teaching Statistics, A Bag of Tricks** (book review). *The American Statistician,* Vol. 72, No. 2. (2018).

Lunzer, A., and *McNamara, A.* **Exploring Histograms:** Interactive essay. Available online at `http://tinlizzie.org/histograms/` (2017).

McNamara, A., Horton, N. J., and Baumer, B. S. **Greater Data Science at Baccalaureate Institutions.** Invited comment as part of discussion for David Donoho's 50 Years of Data Science. *Journal of Computational and Graphical Statistics.* Vol. 26, No. 4, 781-783 (2017).

McNamara, A. **Barriers and Opportunities for Nurturing Statistical Thinking before College** *CHANCE,* Vol. 28, Issue 4. (2015).

McNamara, A. and Hansen, M. **Teaching Data Science to Teenagers.** *Proceedings of the 9th International Conference on Teaching Statistics.* (2014).

McNamara, A. **Dynamic Documents with R and knitr** (book review). *Journal of Statistical Software,* Vol. 56, Book Review 2. (2014).

IN PROGRESS

Hoogeveen, S., Sarafoglou, A., van Elk, M., Wagenmakers, E-J., [many additional coauthors, including *McNamara, A.*]. **A Many-Analysts Approach to the Relation Between Religiosity and Well-being.** *Religion, Brain & Behavior.*

McNamara, A. **On the State of Computing in Statistics Education: Tools for Learning and for Doing.**

McNamara, A., student coauthors to be determined. **The polygon overlay problem in the Flint water crisis**

Molyneux, J., and *McNamara, A.* **mobilizr: An R package for high school data scientists.**

Waring, E., Quinn, M., *McNamara, A.*, et al. **skimr: Compact and flexible summaries of data**

TEACHING

University of St Thomas Department of Computer & Information Sciences

STAT 220: **Statistics I**	Fall 2018, Spring 2019, Fall 2019, Spring 2020, Spring 2021
STAT 220: **Statistics I, R labs**	Spring 2020, Fall 2020
STAT 320: **Statistics II**	Fall 2018, Fall 2019, Fall 2020, Fall 2021
STAT 336: **Data Communication and Visualization**	Spring 2020, Spring 2021, Fall 2021
STAT 360: **Advanced Statistical Software**	Spring 2019

Smith College Program in Statistical and Data Sciences — 2015-2018

SDS 236: **Data Journalism**	Spring 2018
SDS 136: **Communicating with Data**	Fall 2017
SDS/MTH 220: **Introduction to Statistics and Probability**	Fall 2015, Spring 2016, Fall 2017
SDS/MTH 220: **Introduction to Statistics and Probability** (lab)	Fall 2015, Spring 2016
SDS/MTH 291: **Multiple Regression**	Spring 2016, Fall 2016

MassMutual Data Science Development Program

Data visualization seminar (with Jordan Crouser)	Summer 2016, Summer 2017

Advanced git and R Summer 2018

University of California, Los Angeles Statistics Department 2013-2015
STAT 98T: **Data Visualization** (Instructor of record, Collegium of University Teaching Fellows)
STAT 101A: **Introduction to Data Analysis and Regression** (Teaching fellow)
STAT 102B: **Introduction to Computation and Optimization** (Teaching fellow)
STAT 101C: **Introduction to Regression and Data Mining** (Teaching fellow)

Mobilize Project Professional Development Program 2011-2014
Professional Development: **Exploring Computer Science** (Leader)
Professional Development: **Math and Science** (Leader)
Professional Development: **Introduction to Data Science** (Leader)

AWARDS

Waller Education Award, American Statistical Association 2021

Teaching Integrity in Empirical Research Faculty Fellow, Haverford College 2015-2016

Collegium of University Teaching Fellows, University of California, Los Angeles 2014-2015

Dissertation Year Fellowship, University of California, Los Angeles 2014-2015

Graduate Research Fellowship Program, National Science Foundation 2012

Chancellor's Prize Summer Fellowship, University of California, Los Angeles 2011-2012

Konhauser Prize for Mathematical Achievement, Macalester College 2010

RESEARCH AND CONSULTING

NSF ITEST - Collaborative Research Grant 2021-2025
Data science consultant
PIs at the University of Nevada, St Louis University, and the University of Maine received an NSF grant entitled "Collaborative Research: Creating and testing data science learning tools for secondary students with disabilities." They have taken on several advisors and consultants, including myself. My contribution is primarily reviewing new tooling for statistical accuracy and pedagogical relevance.

Coding Conventions Research Group 2021-
Group member
A group of researchers from the University of Minnesota, University of St Thomas, and Penn State University have begun collaborating on research related to R coding conventions in introductory statistics and data science courses. The group is presenting at USCOTS and JSM in summer 2021, and aims to produce a paper by the fall. Other than myself, the group consists of Chelsey Legacy, Vimal Rao, Elle Basner Butler, Bob delMas, Andrew Zieffler, and Matthew Beckman.

Teach the tidyverse Research Group 2021-
Group member
A group of researchers from Duke University, Smith College, Amherst College, Pomona College, and the University of St Thomas have begun collaborating to produce an article on pedagogical reasoning for teaching the tidyverse syntax in R. The group aims to produce a paper by the fall of 2021. Other than myself, the group consists of Mine Çetinkaya-Rundel, Colin Rundel, Ben Baumer, Nick Horton, and Jo Hardin.

"That seems okay to me" Research Group 2020-
Group member

A group of researchers from Metabase, Cal Poly SLO, University of St Thomas, and Carnegie Mellon University have begun collaborating to study the ways experts and novices read and criticize data analysis. We have IRB approval through Cal Poly, and have performed user interviews. Once data is coded, we hope to write a paper by winter 2021. Other than myself, the group consists of Greg Wilson, Allison Theobold, Derek Robinson, Ian Flores Siaca, Kelly Bodwin, Philipp Burckhardt, and Rebecca Nugent.

Smith College, Northampton, MA   2015-2018
Visiting Assistant Professor
At Smith College, my research program focused on statistics education, statistical computing, data visualization, and spatial statistics. In Spring 2016 and Spring 2017, I led groups of undergraduate and post-baccalaureate students as part of the MTH 301 independent research seminar. We focused on Methods to Address the Change of Support and Modifiable Areal Unit Problems.

The Concord Consortium, Emeryville, CA   September 2016-March 2017
Consultant
Worked with William Finzer and the Common Online Data Analysis Platform (CODAP) on integrating 'Data Science Moves' into CODAP.

Viewpoints Research Institute, Los Angeles, CA   September 2016-January 2017
Consultant
Continued collaboration with Aran Lunzer to develop interactive essays related to the impacts of data aggregation in 1- and 2-D.

Viewpoints Research Institute, Los Angeles, CA   2013-2015
Graduate Intern
The Viewpoints Research Group is a research group with a variety of interests including the future of programming, internet-scale computing, and programming language design. I collaborated with other researchers on projects to improve statistical computing tools for novices (those with no statistics or programming experience). Examples include **LivelyR** with Aran Lunzer and **locatr** with Ted Kaehler. Director: Alan Kay.

Mobilize Project, Los Angeles, CA   2011-2014
Graduate Student Researcher
The Mobilize project brings data analysis and statistics to life by allowing high school students to collect information about the world around them using mobile phones, then analyze the data and do something with it. As a graduate student researcher, I developed curriculum to be deployed in LAUSD public high schools, including the innovative Introduction to Data Science course. Over hundreds of hours of professional development, I trained teachers on basic statistical concepts, use of inquiry in teaching, and basic statistical software. Principal Investigator: Rob Gould.

SHORT COURSES AND WORKSHOPS LED

StatPREP Workshop (with team)   July 2021
virtual

StatPREP Workshop (with team)   June 2021
virtual

Statistical Learning in R   February 2021
Internship Network in the Mathematical Sciences (Inmas)   *virtual*

Exploring the Tidyverse in R (with Aaron Kessler)   March 2020
NICAR, Investigative Reporters & Editors Conference   *New Orleans, LA*

Introduction to Data Science in the Tidyverse (with Hadley Wickham)   January 2020
rstudio::conf   *San Francisco, CA*

R for Social Science, Data Carpentry (with Kelsey Gonzalez)   January 2020
Bryn Mawr College   *Bryn Mawr, PA*

StatPREP Workshop (with team)   June 2019
Howard Community College   *Columbia, MD*

Helping the Data Speak (TA for Nathan Yau)   June 2019
eyeo festival workshop   *Minneapolis, MN*

git and GitHub Cornucopia   April 2019
uncoast unconf, John Deere Financial   *Des Moines, IA*

Data Science in the Tidyverse (with Hadley Wickham)   January 2019
rstudio::conf   *Austin, TX*

StatPREP Workshop (with team)   June 2018
University of Hartford   *Hartford, CT*

Intro to R & RStudio   January 2018
rstudio::conf   *San Diego, CA*

Master the Tidyverse (TA for Garrett Grolemund)   October 2017
RStudio workshop   *Washington, DC*

StatPREP Workshop (with team)   June 2017
St. Catherine University   *St. Paul, MN*

Data Science for Statisticians   March 2017
ENAR, International Biometric Society Meeting   *Washington, DC*

Introduction to R (with Coulter Jones)   March 2016
NICAR, Investigative Reporters & Editors Conference   *Denver, CO*

KEYNOTES AND PLENARY TALKS

Speaking R   July 2020
useR! The International R Users Conference   *virtual*

Why the Tidyverse?   August 2019
noRth, University of Minnesota   *Minneapolis, MN*

Data Science as a Superpower   July 2019
QUBES, Evolution of Data in the Classroom, William & Mary   *Williamsburg, VA*

Data Journalism as a Liberal Art   June 2019
LACOL Data Science in the Liberal Arts, Washington and Lee University   *Lexington, VA*

Data Science as a Superpower April 2018
Introduction to Data Science Big Data Day *Los Angeles, CA*

Interfacing with Data September 2017
Data Literacy Conference *Aix-en-Provence, France*

INVITED TALKS

Consistency is key: A case study in R syntaxes March 2021
Teaching Integrity in Empirical Research (TIER) Spring Symposium *virtual*

Thoughts on the polygon overlay problem October 2020
Princeton University Gerrymandering Project *virtual*

How (not) to bring Wikipedia into the classroom August 2020
Joint Statistical Meetings *virtual*

Scraping, iterating, purring July 2020
noRth conference *virtual*

Teaching Data Communication May 2019
Symposium on Statistics and Data Science (SDSS) *Bellevue, WA*

Wrangling Categorical Data in R Without Losing your Mind January 2019
rstudio::conf *Austin, TX*

Key Attributes of a Modern Statistical Computing Tool October 2018
Statistics Department Seminar, Oregon State University *Corvallis, OR*

How Spatial Polygons Shape Our World September 2018
University of Minnesota Institute for Advanced Study *Minneapolis, MN*

How Software Affects Humans' Conceptions of Data: Case Study in R Syntaxes Aug 2018
Joint Statistical Meetings *Vancouver, BC*

Imagining the Future of Statistical Education Software July 2018
International Conference on Teaching Statistics (ICOTS) *Kyoto, Japan*

Making Spatial Aggregation More Transparent April 2018
2018 CGA Conference: Illuminating Space and Time in Data Science. Harvard University *Cambridge, MA*

Scientists Programming February 2018
Evidence about Programmers, Schloss Dagstuhl *Wadern, Germany*

Key Attributes of a Modern Statistical Computing Tool March 2017
Tableau Software *Seattle, WA*

Using Data Visualization to Find Patterns in Multidimensional Data March 2017
Department of Mathematics, Statistics, and Computer Science St. Olaf College *Northfield, MN*

Bridging the Gap Between Tools for Learning and for Doing Statistics November 2016
Department of Educational Psychology, University of Minnesota *Minneapolis, MN*

Bridging the Gap Between Tools for Learning and for Doing Statistics   March 2016
Department of Statistics, University of Massachusetts - Amherst   *Amherst, MA*

Statistical Programming– Past, Present, and Future   December 2014
Department of Statistics, California State University, Fullerton   *Fullerton, CA*

Teaching Data Science to Teenagers (with Mark Hansen)   July 2014
International Conference on Teaching Statistics   *Flagstaff, AZ*

CONFERENCE PRESENTATIONS

Integrating Computation in Statistics: Instructional Decisions for Teaching R   Aug 2021
(with C. Legacy, V. Rao, E. Basner Butler, B. delMas, A. Zieffler, M. Beckman)   *virtual*

Joint Statistical Meetings

Making a Tidy Dress   January 2020
rstudio::conf   *San Francisco, CA*

We should rethink they way we think about percentages   July 2019
SRCCON   *Minneapolis, MN*

Visualizing Data by Hand   June 2018
SRCCON   *Minneapolis, MN*

Teaching Students Reproducibility   May 2018
Electronic Conference on Teaching Statistics (eCOTS)   *online*

How Spatial Polygons Shape Our World   April 2017
OpenVisConf   *Boston, MA*

The Incredible Importance of Variability   November 2016
THINK Conference   *Bay Area, CA*

Pushing the Boundary Between Tools for Learning and for Doing Statistics   August 2016
Joint Statistical Meetings   *Chicago, IL*

The Importance of Parameter Manipulation for Statistics   July 2016
Society for Industrial and Applied Mathematics Annual Meeting   *Boston, MA*

Integrated R Labs for High School Students   June 2016
useR! The R User Conference   *Stanford, CA*

The Gap Between Tools for Learning and for Doing Statistics   May 2016
Electronic Conference on Teaching Statistics   *online*

Do you know Nothing when you see it?   April 2016
OpenVisConf   *Boston, MA*

Using Data Visualization to Find Patterns in Multidimensional Data   June 2015
Big Data Day LA   *Los Angeles, CA*

Teaching R to High School Students (with James Molyneux)   July 2014
useR! The R User Conference   *Los Angeles, CA*

LivelyR: Making R Charts Livelier (with Aran Lunzer) July 2014
useR! The R User Conference *Los Angeles, CA*

Mobilize Project (with Jane Margolis and LeeAnn Trusela) January 2012
Math Science Partnership Learning Network Conference *Washington, DC*

Model and Optimization of Organic Photovoltaic Cells January 2010
Joint Meeting of AMS and MAA *San Francisco, CA*

PANELS AND ROUNDTABLES

Data Communication (panelist) June 2021
Berkeley National Workshop on Data Science Education *virtual*

Fireside Chat (panelist) June 2019
Symposium on Statistics and Data Science (SDSS) *Bellevue, WA*

Data Science Education Panel (panelist) January 2018
Women in Data Science Conference *Boston, MA*

Data Science at Women's Colleges (panelist) October 2017
Women in Statistics and Data Science Conference (WSDS) *San Diego, CA*

Local Data Science Panel Presentation (panelist) February 2017
Women in Data Science (WiDS) satellite conference, Mt Holyoke College *South Hadley, MA*

Graphics Software: Favorites and Best Practices (roundtable leader) August 2016
Joint Statistical Meetings *Chicago, IL*

Implications for Curriculum (panelist) January 2016
Alliance to Advance Liberal Arts Colleges (AALAC) Big Data Workshop *Wellesley, MA*

heR Panel Discussion (panelist) July 2014
useR! The R User Conference *Los Angeles, CA*

POSTER PRESENTATIONS

Computing in the Statistics Curriculum: Lessons Learned from the Educational Sciences
(with C. Legacy, V. Rao, E. Basner Butler, B. delMas, A. Zieffler, M. Beckman) June 2021
USCOTS *virtual*

Pushing the Boundary Between Tools for Learning and for Doing Statistics August 2016
Joint Statistical Meetings *Chicago, IL*

It Ain't Necessarily So: Checking Charts for Robustness (with A. Lunzer) November 2014
IEEE Vis Conference *Paris, France*

Tools for Teaching Data Science May 2014
Women in Statistics Conference *Cary, NC*

Data Visualization on the Soul of the Community August 2013
Joint Statistical Meetings *Montreal, QC*

Model and Optimization of Organic Photovoltaic Cells

Joint Meeting of AMS and MAA, San Francisco, CA	January 2010
Undergraduate Research Symposium, University of Chicago	November 2009
Macalester College, St Paul, MN	October 2009
Institute for Mathematics and its Applications, Minneapolis, MN	July 2009

INVITED WORKSHOPS AND HACKATHONS

uncoast unconf — April 2019
John Deere Financial — *Des Moines, IA*

Evidence About Programmers for Programming Language Design — February 2018
Schloss Dagstuhl — *Wadern, Germany*

Teaching Integrity in Empirical Research Workshop — June 2017
Haverford College — *Haverford, PA*

rOpenSci hackathon — May 2017
CrossCampus — *Los Angeles, CA*

Designing for Uncertainty in HCI — May 2017
CHI Conference — *Denver, CO*

Moving Transparent Statistics Forward — May 2017
CHI Conference — *Denver, CO*

Youth, Learning and Data Science Summit — August 2016
University of California, Berkeley — *Berkeley, CA*

Teaching Integrity in Empirical Research Workshop — June 2016
Haverford College — *Haverford, PA*

rOpenSci hackathon — March 2014
GitHub — *San Francisco, CA*

LOCAL CONTRIBUTIONS

Lunch and Learn: How to Make Your Classroom More Equitable and Inclusive - Computer and Information Sciences Case Study — December 2020
University of St Thomas — *St Paul, MN*

Lunch and Learn: Assessing Students in the Fall with Integrity and Compassion July 2020
University of St Thomas — *St Paul, MN*

Women in Data Science Symposium (panelist) — November 2019
University of Minnesota — *St Paul, MN*

Algorithmic Inequality — November 2019
Groveland Unitarian Universalist Fellowship — *St Paul, MN*

Activities and Thoughts on Teaching a "Data Science for All" Course — April 2019
Southern MN StatChat, St Olaf College — *Northfield, MN*

Handmade Data Viz April 2019
StatChat, Macalester College *St Paul, MN*

Working with Spatial Data: Implications of the Change of Support Problem May 2019
Applied Probability and Statistics Seminar, University of St Thomas *St Paul, MN*

Working with Spatial Data: Implications of the Change of Support Problem April 2019
Guest lecture, PUBH 7462: Advanced Programming and Data Analysis in R, UMN *Minneapolis, MN*

R-Ladies Panel (virtual panelist) March 2019
Amherst R-Ladies *Amherst, MA*

Speed Networking Workshop December 2018
University of St Thomas Association of Women in Science (WINS) *St Paul, MN*

The Power of Algorithms for Good and for Evil November 2018
World Usability Day, University of Minnesota *Minneapolis, MN*

Women in Science (panelist) November 2018
University of St Thomas Association of Women in Science (WINS) *St Paul, MN*

Algorithmic Accountability November 2017
Otelia Cromwell Day workshop, Smith College *Northampton, MA*

Topic IV: Visualization, with Ben Baumer November 2017
New England Isolated Statisticians Meeting, Stonehill College *Easton, MA*

Big Data, Polling, and the Politics of Education March 2017
Guest lecture, AMS 100: Thinking Through the 2016 Election, Smith College *Northampton, MA*

What's Missing? Identifying the Gaps, Biases, and Omissions in Digital Data Oct. 2016
Guest lecture, IDP 160: Digital Effects, Smith College *Northampton, MA*

Futurisms, part II: Intersections: Digital Humanities, Interactive Media and Cultural Heritage (faculty fellow) February 2016
Smith College Kahn Institute *Northampton, MA*

Futurisms, part I: The Ten Thousand Year Collection (faculty fellow) December 2015
Smith College Kahn Institute *Northampton, MA*

Using Data Visualization to Find Patterns in Multidimensional Data November 2015
Guest lecture, CS 342: Statistical Learning, Hampshire College *Amherst, MA*

Using Data Visualization to Find Patterns in Multidimensional Data November 2015
Western Mass Data Science, Stats, and R Meetup *Amherst, MA*

Eyeo Highlights August 2014
Datavis LA Meetup *Los Angeles, CA*

SERVICE TO DEPARTMENT, INSTITUTION, AND PROFESSION

Foundations of Data Science (FoDS) journal   2021
Guest editor
· Guest editor for special issue "Data Science Education Research"
· Worked with other guest editors to develop solicitation
· Publicized solicitation and sought submissions
· Assessed proposed submissions

College of Arts and Sciences DEI Taskforce   2020-
Committee Member
· Also a member of the HEDS data sub-committee

Data Analytics Faculty Board   2020-2022
Committee Member
· This two year term ends May 2022

University of St Thomas Technology Advisory Committee (UTAC)   2019-2023
Committee Member
· This four-year appointment begins Fall 2019
· For the 2020-2021 year, I am serving as Faculty Co-Chair

University of St Thomas HHMI Inclusive Excellence Grant   2019-present
Inclusive Excellence Advisor
· Participated in Inclusive Excellence Training (May 2019)
· Attended welcoming events for incoming first-year students
· Will be serving as an Inclusive Excellence Advisor for 10 incoming first-year students for the 2019-2020 school year

University of St Thomas HHMI Inclusive Excellence Grant   2018-present
CISC representative
· Attended HHMI meetings and luncheons, representing the Computer & Information Sciences Department's interests and reporting back to the department

University of St Thomas Statistics Program Committee   2018-present
Member
· Assisted in the development of new curriculum for the statistics program, including changes to the statistics major and minor, the development and proposal of new upper-level courses, and discussion of statistics-related courses in other disciplines.

Joint Statistical Meetings Program Committee   2019-2020
Statistics and Data Science Education Section Chair
· As section chair-elect, organized roundtables and Birds of a Feather sessions for the Section on Statistics and Data Science Education for JSM 2019
· Served as proxy for current section chair at March 2019 JSM organizing meeting in Alexandria, VA
· As section chair, organized invited sessions, contributed sessions, and poster sessions for the Section on Statistics and Data Science Education for JSM 2020
· As section chair, reorgnized invited sessions, contributed sessions, and poster sessions for the Section on Statistics and Data Science Education for the online version of JSM 2020 when covid-19 forced a pivot

Statistics and Data Science Symposium Program Committee 2018-2019
Visualization co-chair, with Silas Bergan
· As co-chair, helped organize invited sessions on visualization for SDSS
· As co-chair, organized and scheduled contributed sessions on visualization for SDSS

Smith College Statistical and Data Sciences Program Committee 2015-2018
Faculty member
· Assisted in developing the major in Statistical and Data Sciences (approved April 2016).
· Voted on departmental policy about honors theses, special studies, course waivers, and the like.
· Organized invited talk by Amanda Cox (long time member of the graphics team at The New York Times, now editor of The Upshot), attended by almost 200 people from the college and community.
· Organized invited talk by Christine Zhang '09 (alumna and recipient of 2016 Mozilla Open News Fellowship, data journalist at the LA Times), attended by approximately 100 people.
· Managing Twitter presence @SmithCollegeSDS.

Women in Statistics and Data Science Conference (WSDS) San Diego, CA 2017
Panel chair
· WSDS R-Ladies Panel: Improving Gender Diversity in a Male-Dominated Community

Joint Statistical Meetings Chicago, IL 2016
Session Chair
· Toward Better Communication of Information with Statistical Graphics – Contributed Papers
· Reproducibility in Statistics and Data Science – Invited Papers (substitute chair)

Five College DataFest 2015-2018
Co-organizer with Ben Baumer
· Planned and executed the 2016 and 2017 FiveCollege DataFests
· DataFest is a weekend-long data hackathon event for more than 100 undergraduate students from Smith, Mt Holyoke, Hampshire, Amherst, and UMass Amherst.
· Managed social media, including Wordpress website and Twitter presence @FiveCollegeStat.
· Recruited data science experts to serve as VIP visitors and judges.
· Solicited donations from corporations like Google and RStudio.
· Coordinated prizes and swag for students.

University of California, Los Angeles DataFest 2011-2015
Planning Member
· As a graduate student, assisted in planning and executing the 2012, 2013, 2014, and 2015 UCLA DataFests for undergraduates, attended by 100-200 undergraduate students from UCLA, the University of Southern California, Pomona College, California Polytechnic State University San Luis Obispo, and the University of California, Riverside.
· Managed Twitter presence @UCLADataFest.
· Served as on-the-ground-advisor for students at the event, discussing ideas and coding issues.
· Assisted in coordinating donations and swag from corporations like GitHub, Google, Revolution Analytics, and RStudio.

Los Angeles useR! Conference Organizing Committee 2013-2014
Planning Member
· Assisted in planning and executing the 2014 international R user conference (700 attendees).
· Recruited and coordinated 80 student volunteers.
· Assisted with conference website before, during, and after the conference.

- Promoted conference on social media, encouraged minority participation.
- Supervised on-the-ground conference logistics, including registration, catering, and facilities services.

UCLA Graduate Student Orientation Planning Committee   2012-2013
Tour Coordinator
- Helped plan and execute the 2012 and 2013 UCLA grad student orientations, attended by 1,000+ incoming graduate students each year.
- Discussed general orientation issues, such as panel topics and logistical concerns.
- Organized and trained 15 volunteer tour guides to lead tours campus.
- Prepared tour materials and checked routes for North Campus, South Campus, and General tours.
- On the day of orientation, coordinated hourly tours and assigned tour guides to routes.

Macalester College Admissions   2013-present
Volunteer interviewer and college representative
- Performed alumni interviews of prospective students applying to Macalester in Southern California and Western Massachusetts
- Represented Macalester at the 2015 Vistamar College Fair, answering questions about Macalester and the admissions process

Southern California AP Statistics Poster Competition   2014
Judge
- Judged entries to the 2014 Southern California AP Statistics Poster Competition

UC Day in DC   May 2013
University of California, Los Angeles Delegate
- Represented UCLA and graduate student interests at the University of California's annual federal advocacy day in Washington, DC.
- Met with congress members and their staff to discuss Federal funding for programs impacting grad students.

UCLA Graduate Resource Center Oversight Committee   2011-2012
Voting Member
- Assisted in developing a new strategic plan for UCLA's graduate resource center

Ad-hoc referee   2014-present
Journals:
- Journal of Statistics Education (JSE)
- Journal of Statistical Software (JSS)
- Statistics Education Research Journal (SERJ)
- Technology Innovations in Statistics Education (TISE)
- The American Statistician (TAS)
- Computer Science Education (CSE)
- PLOS Biology

Ad-hoc referee   2017-present
Conferences:
- Institute of Electrical and Electronics Engineers Vis Conference (IEEE VIS)
- Conference on Human Factors in Computing Systems (CHI)

SKILLS

Languages	Expert: R, LaTeX, HTML, Markdown
	Intermediate: Spanish, Python, git, JavaScript, Matlab, Mathematica, ArcGIS
Social Media	Twitter: **@AmeliaMN**, 12,000+ tweets, 12,000+ followers
	Currently managing **N/A**
	Formerly managed **@SmithCollegeSDS**, **@FiveCollegeStat**, **@UCLADataFest**, **@user2014_UCLA**

MEMBERSHIPS IN PROFESSIONAL SOCIETIES

Association for Computing Machinery (ACM)	2019-present
American Statistical Association (ASA)	2012-present
Association for Women in Mathematics (AWM)	2008-2010, 2014-present
Society for Industrial and Applied Mathematics (SIAM)	2012-2016
Institute of Electrical and Electronics Engineers (IEEE)	2016-2017
WNAR: International Biometric Society (WNAR)	2013-2014