

Ivan P. Ramler

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St. Lawrence University

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Google Scholar: <https://scholar.google.com/citations?user=WPfelsUAAAAJ>

EDUCATION

2008	IOWA STATE UNIVERSITY <i>PhD in Statistics</i> <i>Dissertation: Improved statistical methods for k-means clustering of noisy and directional data</i> <i>Advisor: Dr. Ranjan Maitra</i>	Ames, IA
2004	IOWA STATE UNIVERSITY <i>M.S. in Statistics</i> <i>Thesis Title: Testing for Clustering in Univariate Directional Data with Applications to North Dakota Predator Movement Patterns</i> <i>Advisor: Dr. Tapabrata Maiti</i>	Ames, IA
2002	UNIVERSITY OF MINNESOTA - MORRIS <i>B.A. in Mathematics and Statistics, minor in Economics</i>	Morris, MN

WORK HISTORY

2009 - Present	ST. LAWRENCE UNIVERSITY <i>Associate Professor of Statistics – with Tenure (since 2015)</i> <i>Assistant Professor of Statistics (2011 – 2015)</i> <i>Visiting Assistant Professor of Statistics (2009 – 2011)</i> Courses taught include: Introduction to Data Science (Stat 234), Introductory Statistics (Stat 113), Applied Regression Analysis (Stat 213), Probability (Stat 325), Mathematical Statistics (Stat 326), Introduction to Computer Programming (CS 140), and senior capstone projects	Canton, NY
2002 - 2008	IOWA STATE UNIVERSITY <i>Teaching Assistant – Instructor, Department of Statistics (2007 – 08, Lab only - 2002)</i> <i>Research Assistant, Department of Statistics (2005 – 07)</i> <i>Statistical Consultant, Agricultural Experiment Station (2002 – 05)</i>	Ames, IA
Summer 2006	LOS ALAMOS NATIONAL LABORATORY (LANL) <i>Summer Internship, Statistical Sciences Group</i>	Los Alamos, NM

RECENT PEER-REVIEWED PUBLICATIONS (Work completed post-tenure, * Denotes equally contributing authors)

1. Chapman, J., *Hill, A., *Nagel-Myers, J., and *Ramler, I. (2019) "The Liberal Arts Science Scholars Program: A Multidisciplinary Model for Supporting STEM Students through the First Year." *Journal of STEM Education* 20, 17.
2. *Lee, C.S. and *Ramler, I. (2017) Identifying and evaluating successful non-meta strategies in league of legends. In *Proceedings of Foundations of Digital Games (FDG) 2017*. doi: doi.org/10.1145/3102071.3102081. **Received Best Paper Award at FDG 2017.**

3. Jahne, M. A., Rogers, S. W., Holsen, T. M., Grimberg, S. J., **Ramler, I.**, and Kim, S. (2016) Bioaerosols Deposition to Food Crops Near Manure Application: Quantitative Microbial Risk Assessment, *Journal of Environmental Quality* 45 (2), 666-674, doi: 10.2134/jeq2015.04.0187
4. Chaplin-Kramer, R., **Ramler, I.**, Sharp, R., Haddad, N., Gerber, J., West, P., Mandle, L., Engstrom, P., Baccini, A., Sim, S., Mueller, C., and King, H. (2015) Degradation in carbon stocks near tropical forest edges. *Nature Communications*. 6:10158, doi: 10.1038/ncomms10158
5. *Lee, C. S. and ***Ramler, I.** (2015) "Rise of the bots: Bot prevalence and its impact on match outcomes in League of Legends," *2015 International Workshop on Network and Systems Support for Games (NetGames)*, Zagreb, 2015, pp. 1-6. doi: 10.1109/NetGames.2015.7382992
6. Jahne, M., Rogers, S., Holsen, T., Grimberg, S., **Ramler, I.** (2015) Emission and Dispersion of Bioaerosols from Manure Application Sites: Human Health Risk Assessment. *Environmental Science and Technology* 49, 9842-9849.
7. *Lee, C. S. and ***Ramler, I.** (2015) Investigating the Impact of Game Features and Content on Champion Usage in League of Legends. In *Proceeding of Foundations of Digital Games 2015*.

OLDER PEER-REVIEWED PUBLICATIONS (Work completed pre-tenure)

8. Chaplin-Kramer, R., Sharp, R., Mandle, L., Sim, S., Johnson, J., Butnar, I., Mila i Canals, L., Eichelberger, B., **Ramler, I.**, Mueller, C., McLachlan, N., Yousefi, A., King, H., Kareiva, P. (2015) Spatial patterns of agricultural expansion determine impacts on biodiversity and carbon storage. *Proceedings of the National Academy of Sciences of the United States of America* 112 (24), 7402-7407.
9. Jahne, M., Rogers, S., **Ramler, I.**, Holder, E., and Hayes, G. (2015) Hierarchical Clustering Yields Insight into Multidrug-Resistant Bacteria Isolated from Cattle Feedlot Wastewater Treatment System. *Environmental Monitoring and Assessment*. 187:4168 (1) doi: 10.1007/s10661-014-4168-9.
10. **Ramler, I. P.**, and Chapman, J. L. (2011). Introducing Statistical Research to Undergraduate Mathematical Statistics Students using the Guitar Hero Video Game Series. *Journal of Statistics Education*. 19 (3).
11. Willson, S., Sharp, R., **Ramler, I. P.**, and Sen, A. (2011). Spatial Movement Pattern Optimization in an Amazonian *Eciton burchellii* Army Ants. *Insectes Sociaux*. 58: 325-334.
12. Maitra, R. and **Ramler, I. P.** (2010). A k -mean-directions algorithm for fast clustering of data on the sphere. *Journal of Computational and Graphical Statistics*. 19 (2), 377 – 396.
13. Maitra, R., and **Ramler, I. P.** (2009). Clustering in the Presence of Scatter. *Biometrics*. 65, 341 – 352.

NON-PEER REVIEWED PUBLICATIONS (+ denotes completed post tenure)

1. +**Ramler, I.**, Lee, C.S., and Schuckers, M. (2019) Identifying Symbiotic Relationships between Champions in League of Legends. *Proceedings for the 2019 Joint Statistical Meetings*, Sports Statistics Section. Alexandria, VA: American Statistical Association. 2362 – 2369.
2. **Ramler, I. P.** (2012). An Analysis of Beer Styles. *Proceedings of the 2012 Joint Statistical Meetings*. 2513 – 2523.
3. **Ramler, I. P.** (2010). Introducing Statistical Research to Undergraduate Mathematical Statistics Students using the Video Game Series, Guitar Hero. *Proceedings of the 2010 Joint Statistical Meetings*. 5359 – 5370. (Precursor to Introducing Statistical Research to Undergraduate Mathematical Statistics Students using the Guitar Hero Video Game Series. *Journal of Statistics Education*. 19 (3).)

BOOK CHAPTERS (*Denotes equally contributing authors, + denotes completed post tenure)

1. +*Lee, C.S. and ***Ramler, I.** (2019) A Data Science Approach to Exploring Hero Roles in Multiplayer Online Battle Arena Games. Invited book chapter for *Data Analytics Applications in Gaming and Entertainment. Data Analytics Applications Series*, Chapter 4, pages 50 – 78. CRC Press.
2. Willson, S. K., Sharp, R., **Ramler, I.**, and Sen, A. (2013). Spatial movement optimization in Amazonian *Eciton burchellii* army ants (translated into Spanish). In *Reporte Manu 2013: Pasión por la Investigación en la Amazonia Peruana*. Chapter 2, pages 156 – 177. San Diego Zoo Global Publications, CA.

BOOK REVIEWS

1. **Ramler, I. P.** (2014). Review of *Introduction to Statistics Through Resampling Methods and R* by Phillip I. Good. Reviews of Books and Teaching Materials, *The American Statistician*, 68 (1), 65.
2. **Ramler, I. P.** (2012). Review of *Practicing Statistics: Guided Investigations for the Second Course* by Shonda Kuiper and Jeffrey Sklar. Reviews of Books and Teaching Materials, *The American Statistician*, 66 (3), 203.
3. **Ramler, I. P.** (2012). Review of *The R Primer* by Claus Thorn Ekstrom. Reviews of Books and Teaching Materials, *The American Statistician*, 66 (2), 150.

GRANTS – FUNDED (+ Denotes post tenure)

1. +Co-Primary Investigator. National Science Foundation Award Number 193080. *S-STEM: Scholarships in Science, Technology, Engineering, and Mathematics – “Increasing Accessibility to the Sciences through Mentoring Networks, Research Experiences, and Scholarships”*. Duration: March 1, 2020 – Feb 28, 2025. Award amount: \$999,910. PI: J. Chapman
2. +Co-Primary Investigator. National Science Foundation Award Number 1807502. *Hudson River Undergraduate Mathematics Conference 2018*. Duration: February 15, 2018 – July 31, 2018. Award amount: \$13,886. PI: M. Schuckers
3. +Co-Primary Investigator. National Science Foundation Award Number 1458712. *S-STEM: Scholarships in Science, Technology, Engineering, and Mathematics – “Liberal Arts Science Scholars”*. Duration: April 1, 2015 – March 31, 2020. Award amount: \$618,524. PI: J. Chapman
4. Senior Personnel. National Science Foundation. *MRI-R2: Acquisition of High Performance Computer and Microarray Scanner for Interdisciplinary Research in Computer Science and Biology at St. Lawrence University*. Duration: July 1, 2010 – June 30, 2013. Award amount \$179,336.

GRANTS - UNFUNDED (Sample)

1. Co-Primary Investigator. A Research Experience for Undergraduates (REU) on the Statistical Analysis of Sports Data, American Statistical Association, \$38,667. Submitted February 2016.
2. Co-Primary Investigator. National Science Foundation Award Number 1612649. *Tapping Technology Project* Requested amount: \$1,005,730. Submitted November 2015

RECENT PRESENTATIONS (for work completed post tenure)

1. **Keynote address** “How Data Science Made Me a Better Gamer” 2020 Mathematics Conference and Competition of Northern New York (MCCNNY). Potsdam, New York, February 29, 2020
2. “Profiling Character Viability across Player Skill Levels in Esports Games” 2019 Rocky Mountain Symposium on Analytics in Sports. Denver, Colorado, August 2019.
3. “Identifying Symbiotic Relationships between Champions in League of Legends” 2019 Joint Statistical Meetings, Denver, Colorado, July 2019. *Presented by M. Schuckers on behalf of I. Ramler and C.S. Lee*
4. “Identifying & Evaluating Successful Team Compositions in League of Legends” 2018 RIT Sports Analytics Conference. Rochester, New York, August 2018
5. “Not an Oxymoron: Liberal Arts Science Scholars. 2018 National Science Foundation’s “STEM for All Video Showcase”. May 2018. <http://stemforall2018.videohall.com/p/1268> Jointly created with Jessica Chapman, Jeff Chiarenzelli, Adam Hill, and Judith Nagel-Myers
6. “Mentoring Undergraduate Research Panel” Invited Panelist at the Hudson River Undergraduate Mathematics Conference (HRUMC). Canton, New York, April 2018.
7. “Modules for Infusing Data Science into the Statistics Curriculum” <https://ds4stats.github.io/uscots2017/> Assisted Workshop (led by Adam Loy) at USCOTS 2017: Show Me The Data. State College, Pennsylvania, May 2017.
8. “Implementing an Interdisciplinary NSF S-STEM Program at Small Liberal Arts Colleges” Poster presentation at USCOTS 2017: Show Me The Data. State College, Pennsylvania, May 2017.
9. “DYOD (Download Your Own Data)” Poster co-presented with Robin Lock at USCOTS 2017: Show Me The Data. State College, Pennsylvania, May 2017.
10. “Rise of the Bots: An Investigation of Illicit Bot Usage in League of Legends” 14th International Workshop on Network and Systems Support for Games (NetGames), Zagreb, Croatia, December, 2015.
11. “Modeling Carbon Edge Effects Detected by Remote Sensing across the Pantropics” 2015 Joint Statistical Meetings, Seattle, Washington, August 2015.

OLDER PRESENTATIONS (for work completed pre-tenure)

12. “My Life as an Applied Statistician.” Science and Mathematics Visiting Alumni Program Seminar series. University of Minnesota – Morris. April 2015. (Invited)
13. “A Study on Bird Nest Success Rates on Small Family Farm Hayfields.” Poster presentation at 2014 Joint Statistical Meetings. Boston, MA, August 2014.
14. “Advice for using faculty connections to create research opportunities for undergraduates.” Poster presentation co-presented with Chapman, J. L. at the 9th International Conference on Teaching Statistics. Flagstaff, Arizona, July 2014.
15. Predicting Owner Tendencies in Fantasy Football Drafts. Poster presentation at 2013 Joint Statistical Meetings. Montreal, ON, August 2013.

16. An Analysis of Beer Styles. Poster presentation at 2012 Joint Statistical Meetings. San Diego, CA, July 2012.
17. "Using Video Games to Introduce Statistical Research in Undergraduate Statistics Courses." Poster presentation co-presented with Chapman, J. L. at USCOTS 2011: The Next Big Thing. Cary, North Carolina, May 2011.
18. "An Introduction to Cluster Analysis with Applications to Time Series Microarray Experiments." Seminar series sponsored by the NSF Interdisciplinary Training for Undergraduates in Biological and Mathematical Sciences. Clarkson University. October 2010. (Invited)
19. "Guitar Hero M326: A Mathematical Statistics Project for Undergraduates." 2010 Joint Statistical Meetings, Vancouver, British Columbia, August 2010.
20. "A Guitar Hero Based Project in Mathematical Statistics." CAUSEweb.org Activity Webinar Series. May 2010. (Invited. Also available for download as a podcast through iTunes.)
21. "A (Very Brief) Introduction to R. Quantitative Research Center Workshop." St. Lawrence University. April 2009 and February 2010.
22. "A k -mean-directions algorithm for clustering data on the sphere." 2009 Joint Statistical Meetings. Washington, DC, August 2009.
23. "Clustering in the Presence of Scatter." Spring Research Conference on Statistics in Science and Technology. Ames, IA, May 2007.
24. "Clustering in the Presence of Scatter." Poster presentation at X CLAPEM: Latin American Congress in Probability and Mathematical Statistics. Lima, Peru, March 2007.
25. "Statistical Tests for Vapor Return Monitoring Systems." Poster presentation co-presented with Wakefield, T. at 2002 Joint Mathematics Meetings. San Diego, CA, January 2002. Received a Student Poster Award.

WEB APPLICATIONS (^ Denotes Student Author)

1. **Ramler, I.** *Card-Level Analytics for Clash Royale* https://esportsanalytics.shinyapps.io/RoyaleAPI_extender/
2. **Ramler, I.**, Lock, R. and ^Choeyang, T. *IMDB TV Show Web Scraper* <http://shiny.stlawu.edu:3838/TVSeries/>
3. ^Fredericks, J. and **Ramler, I.** *Carbon Density in the Pantropics.* <http://shiny.stlawu.edu:3838/NatCap/CarbonLoss/>
4. **Ramler, I.** and Lee, C. *Rise of the Bots.* <http://shiny.stlawu.edu:3838/esports/lolbots/>
5. **Ramler, I.** and Lee, C. *LoLNOVA: Analysis of Variance of Champion Usage in League of Legends.* <http://shiny.stlawu.edu:3838/esports/lolnova/>

PUBLIC DATASETS and OTHER RESEARCH CONTENT

1. Lee, C.S. and **Ramler, I.** *League of Legends Team Composition Data.* Zenodo. <https://zenodo.org/record/582666>

2. Lee, C. and **Ramler, I.** *League of Legends Illicit Bot Prevalence Data*. Zenodo. <https://zenodo.org/record/21708>
3. **Ramler, I.**; Chaplin-Kramer, R.; Sharp, R.; Haddad, N.; Gerber, J.; West, P.; Mandle, L.; Engstrom, P.; Sim, S.; Mueller, C.; King, H. *Grid Based Global Carbon Edge Regression Coefficients*. Zenodo. <https://zenodo.org/record/17299>
4. Sharp, R.; Chaplin-Kramer, R.; **Ramler, I.**; Haddad, N.; Gerber, J.; West, P.; Mandle, L.; Engstrom, P.; Sim, S.; Mueller, C.; King, H. *Output from carbon forest edge effect analysis: edge effect distance and magnitude*. Zenodo. <https://zenodo.org/record/17788>
5. Sharp, R.; Chaplin-Kramer, R.; **Ramler, I.**; Haddad, N.; Gerber, J.; West, P.; Mandle, L.; Engstrom, P.; Sim, S.; Mueller, C.; King, H. *Distance from forest edge in the Pantropics*. Zenodo. <https://zenodo.org/record/18389>
6. Sharp, R.; Chaplin-Kramer, R.; Haddad, N.; Engstrom, P.; Gerber, J.; **Ramler, I.**; West, P.; Mandle, L.; Sim, S.; Mueller, C.; King, H. *Input data for 'forest_carbon_edge_effects'*. Zenodo. <https://zenodo.org/record/18620>

STUDENT RESEARCH PROJECTS MENTORED (14 Total)

Entertainment Analytics

1. St. Lawrence University Fellow (Faculty Advisor): *Investigating the Most Effective Card-upgrade Strategy in Clash Royale* with Siyuan Zhang. Summer 2020
2. McNair Scholar (Faculty Advisor): *What Drove the Office at Dunder Mifflin? An Analysis of Character Interactions and Their Impact on IMDb Ratings* with Brittanie Gordon. Summer 2020
3. McNair Scholar (Faculty Advisor): *Using Cluster Analysis to Understand Long Term Viability in Clash Royale* with Susan Liu. Summer 2019.
4. St. Lawrence University Fellow (Faculty Advisor): *Creating a Recommendation System for Books on Project Gutenberg* with Emily Viehl. Summer 2018.
5. McNair Scholar (Faculty Advisor): *Exploring Facebook through R* with Shyanne White. Summer 2017.
6. Collegiate Science and Technology Entry Program (Faculty Advisor): *Using IMDb's TV Show Ratings as a Teaching Tool* with Tenzin Choeyang. Summer 2016. <http://shiny.stlawu.edu:3838/TVSeries/>
7. McNair Scholar (Faculty Advisor): *Comparing Genres of Movie Scripts: An Application of Stylometry* with James Holly-Grisham. Summer 2016.
8. McNair Scholar (Faculty Advisor): *Predicting Owner Tendencies in Fantasy Football Drafts* with Juan Chang. Summer 2013.

Applications to Biological, Environmental, and Physical Sciences

1. St. Lawrence University Fellow (Faculty Advisor): *Creating a Statistical Model for Evaluating the Concentration of Smog in China* with Haojing Jia. Summer 2019.
2. St. Lawrence University Fellow (Faculty Advisor): *Carbon Density in the Pantropic Forests* with Janelle Fredericks. Summer 2015. <http://shiny.stlawu.edu:3838/NatCap/CarbonLoss/>

3. PhD Dissertation Committee Member: Michael Jahne, Environmental Science and Engineering, Clarkson University. *Emission, Transport, and Quantitative Microbial Risk Assessment of Bioaerosols Following the Land Application of Manure*. Completed April 2015
4. St Lawrence University Fellow (Faculty Advisor): *Predicting the Lifetime of Plutonium Fuel Cells* with Kathryn Christensen. Summer 2013. In collaboration with Brian Weaver (Statistical Sciences Group, Los Alamos National Lab).
5. St Lawrence University Fellow (Faculty Advisor): *An Interactive Program for Modeling Autocorrelation Using Sums of Rational Functions* with Chelsey Legacy. Summer 2013. In collaboration with Brian Weaver (Statistical Sciences Group, Los Alamos National Lab).
6. St Lawrence University Fellow (Faculty Advisor): *Improving Plutonium Management at the Los Alamos National Laboratory* with Kerrin Ehrensbeck. Summer 2012. In collaboration with Brian Weaver (Statistical Sciences Group, Los Alamos National Lab).

SENIOR PROJECTS/HONORS THESES ADVISED (53 Total Students Mentored)

Entertainment Analytics (21 students)

- Gabrielle Collins – *Modeling Synergy in League of Legends Champions* (Spring 2020, non-SYE Independent Study)
- Abigail Collins – *Modeling Synergy in Clash Royale Cards* (Spring 2020, non-SYE Independent Study)
- Alex Terry – *Measuring the Impact of Leveling Spell Cards and Their Interactions with Troop Cards in Clash Royale* (Spring 2020, non-SYE Independent Study)
- Erin-Grace Carey – *Web scraping and Analyzing Dog Breed Information from The American Kennel Club* (Spring 2020)
- Emily Viehl – *Creating a Content Based Recommendation System Using Sentiment Analysis, Stylometry, and Topic Modeling* (Spring 2019)
- Sarah Strong – *Systematic Gender Bias in League of Legends* (Spring 2019)
- Beau Yaremko – *Applying Tree-based Models to Find Successful Team Compositions in Heroes of the Storm* (Spring 2018)
- Samantha Ormsby – *Applying Sentiment Analysis to the Harry Potter Series* (Spring 2017)
- Statistics SYE Seminar on Text Mining (9 students, Spring 2017)
 - Carrie Pomainville – *An Emotion Based Sentiment Analysis of The Hunger Games Characters and Books* (Spring 2017)
 - Julia Holter – *Sentiment Analysis of Individual Characters in the Works of J.R.R. Tolkien* (Spring 2017)
 - Maxime Bost-Brown – *A Sentiment Analysis: Star Wars versus Star Trek* (Spring 2017)
 - Alexandria Haehl – *Presidential Speeches of the United States: Stylometric, Sentiment, and Cluster Analyses* (Spring 2017)
 - Mary Beth Benzing – *Sentiment Analysis of Amazon Customer Reviews* (Spring 2017)
 - Yunjia Wang – *Applying Cluster Analysis to Festival of Science Abstracts* (Spring 2017)
 - Shihao Li – *Analysis of Dialogue in Friend* (Spring 2017)
 - Lilly Schwarz – *Stylometrics and Sentiment Analysis of The Weekend Update Saturday Night Live Scripts* (Spring 2017)
 - Morgan Darby – *Investigating Lyrics through Stylometric Techniques* (Spring 2017)
 - James Holley-Grisham – *Developing a Sentiment Analysis to Improve Selection of NFL Draft Picks* (Spring 2017)
- Zhengjing Chu – *Implementing a Prisoner's Island Matchmaking Algorithm for Online Video Games* (Fall 2015 – Spring 2016, joint with Dr. Choong-Soo Lee)

- Juan Chang – *Predicting Owners’ Tendencies in Fantasy Football Drafts* (Fall 2013)
- Nobu Yamanashi – *Advanced Fantasy Football User Draft Tool* (Fall 2010, Honors)

Applications to Biological, Environmental, and Physical Sciences (2 students)

- Kathryn Christensen – *Understanding Uncertainty in Predicting the Lifetime of Plutonium Fuel Cells* (Spring 2014, Honors, joint with Dr. Daniel Look)
- Kerrin Ehrensbeck – *Using Bayesian Statistics to Model the Plutonium Management Models for the Los Alamos National Laboratory* (Fall 2012, Honors)

Statistical Methodology and Other General Statistics Projects (30 students)

- Caroline Crall – *Understanding Interactive Analyses with Application to Election Data* (Fall 2020)
- Statistics SYE Seminar (10 students, Spring 2020)
- Nilza Angmo – *Measuring happiness in 150 countries through cluster analysis* (Spring 2019)
- Nevaan Perera – *Using Sentiment Analysis to Detect Bullying and Toxicity on Social Media* (Spring 2018)
- Kersey Reed – *The Effect of Principal Components Analysis on the Accuracy of Clustering Algorithms* (Spring 2016)
- Statistics SYE Seminar (5 students, Spring 2016)
 - Janelle Fredericks – *An Introduction to Gaussian Mixture Models through Model-Based Clustering* (Spring 2016)
 - Elizabeth Escobar – *Methods and Applications of Quantile Regression Models* (Spring 2016)
 - Brooke McGraw – *Using Linear Discriminant Analysis to Predict Beer Styles* (Spring 2016)
 - Sijia Qi – *Using Support Vector Machines to Predict Final Grades in Introductory Statistics* (Spring 2016)
 - Curtis Hurlbut – *Exploring Robust Alternatives to Least Squares Regression* (Spring 2016)
- Son Vuong – *Haggling with Google Flights: Predicting Flight Prices* (Fall 2015, joint with Dr. Lee)
- Chelsey Legacy – *An Interactive Program for Modeling Autocorrelation Structures Using Sums of Rational Functions* (Fall 2013 – Spring 2014, Honors)
- Jeremy Moulton – *The Effectiveness of Home Education* (Spring 2012)
- Caitlin McArdle – *A New Perspective on Visualizing Likert Data* (Fall 2011, Honors)
- Statistics Senior Seminar (MATH 450) – 5 students (Spring 2011)
- Jeremy Hadler – *Evaluating the Robustness of Competing Clustering Algorithms* (Spring 2010, Honors)
- Karma Sonam – *Investigating the convergence rate of sampling distributions on skewed populations* (Spring 2010, Honors)

PROFESSIONAL SERVICE

- Reviewer for Carnegie Mellon Sports Analytics Conference Research Paper Competition (2020)
- Judge for the Undergraduate Statistics Project Competition – USPROC (2018)
- Session chair, *Hudson River Undergraduate Mathematics Conference* (2018, 2013)
- Associate Editor, *Journal of Statistics Education* (2013 - 2016)
- AP Statistics Reader (2009, 2010)
- Reviewer (recent journals include the *Journal of Statistics Education*, *The American Statistician*, and *Advances in Data Analysis and Classification*, *Journal of Quantitative Analysis in Sports*)
- Workshop/Discussion Leader for North Country R Users Group (multiple times)

UNIVERSITY and DEPARTMENTAL SERVICE

- Festival of Science Planning Committee (chair 2019, 2020, member 2014 – 2018)
- Computer Science Visiting Search Committee (member 2019)
- Data Science Tenure Track Search Committee (chair 2018, member 2017)
- Salary and Benefits Committee (member, 2016 - present)

- Athletic Advisory Committee (member, 2017 – 2019)
- Faculty Mentoring Program (mentor, 2017 - 2018)
- Scholarships, Fellowships, and Grants Committee (member, 2014 – 2016)
- St. Lawrence Q-Club Co-Advisor (2010 – 2013, 2014 – 2016)
- Statistics Teaching Post-Doc Search Committee (chair 2016)
- Educational Technology Committee (member, 2012 – 2013)
- Computer Science Tenure Track Search Committee (member, 2012 – 2013)
- Denmark Study Abroad Selection Committee (member, 2012 - 2013)
- Talented Juniors (Fall 2010, co-taught with Jessica Chapman, Robin Lock, and Michael Schuckers)

AWARDS

- Best paper award at Foundations of Digital Games 2017 for the paper *Identifying and evaluating successful non-meta strategies in league of legends*. (Co-author: Lee, C.)
- William B. Bradbury, Jr. Faculty Award. (Research and travel award, Fall 2013)
- Vincent Sposito Computing Excellence Award (Iowa State University, 2006)
- Oscar Kempthorne Award (Iowa State University, 2003 - This award is given to the top student in Master's level Linear Models course)
- Student Best Poster Award at 2002 Joint Mathematics Meeting for "Statistical Tests for Vapor Return Monitoring Systems." (Co-presenter: Wakefield, T.)