

Rebecca Nugent

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Positions

Assistant Teaching Professor	Fall 2009 - present
Visiting Assistant Professor/NSF VIGRE Postdoctoral Fellow Department of Statistics, Carnegie Mellon University, Pittsburgh, PA	Fall 2006 - Summer 2009
Research Assistant Unsupervised learning; nonparametric clustering methodology Werner Stuetzle, Department of Statistics, University of Washington	Fall 2002 - Summer 2006

Education

University of Washington Ph.D. in Statistics; Dissertation Title: "Algorithms for Estimating the Cluster Tree of a Density" <i>Advisor:</i> Werner Stuetzle; <i>Committee:</i> Adrian Raftery, Marina Meila, Peter Hoff, Jim Hermanson (GSR)	Seattle, WA Dec 2006
Stanford University M.S. in Statistics	Stanford, CA June 2001
Rice University B.A. with Majors in Mathematics, Statistics, and Spanish (Language/Linguistics)	Houston, TX May 1999

Research Interests

Clustering/Unsupervised Learning

nonparametric multivariate analysis methods; cluster trees; spanning trees; generalized single linkage clustering
assessing cluster significance; pruning and merging; high-dimensional density estimation and visualization

Exploring Hierarchical Latent Class Structures: How Do We Learn?

clustering methodologies as proxies for cognitive diagnosis models; psychometrics
Joint work with The Human Computer Interaction Institute, Carnegie Mellon University

Text Mining/Record Linkage, Disambiguation

matching algorithms for disambiguating text records; determining networks of colleagues and innovation;
work is done in context of characterizing intellectual innovation via patents in the presence of offshoring firms
Joint work with Engineering & Public Policy, Carnegie Mellon University

Characterizing Sleep Quality and Quantity

Characterizing sleep duration, quality, consistency and its association with health;
Joint work with Department of Internal Medicine, Texas Tech Health Sciences Center

Honors and Awards

Classification Society

President-Elect	Jan 2010-Jan 2012
Board of Directors	Jan 2008-Jan 2010

City University of New York Graduate School

Honorarium Recipient for Invited Talk	June 2011
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Chikio Hayashi Award

Young Promising Researcher award (under 35 years old); monetary prize and travel grant presented biennially by the International Federation of Classification Societies (IFCS)	2009
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Carnegie Mellon University Panhellenic Role Model and Mentor Award

undergraduate students nominated award	2007-2011
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Winner, 2005 American Statistical Association Statistical Computing and Graphics Student Paper Competition

	January 2006
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University of Washington Excellence in Teaching Award

	2003
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Excellence in Teaching by a Graduate Student

Department of Statistics, University of Washington, Seattle, WA	2001 - 2002
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Rice Engineering Alumni Senior Engineering Award/Scholarship

	May 1999
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Impact Award - Rice Women's Resource Center

	May 1999
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Who's Who in American Universities

	1998-1999
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Rice University Vice Presidential Appreciation Award
Commendation from the Senate of the State of Texas

May 1998
1992

Grants

NSF: The NSF-Census Research Network Sept 2011 - Sept 2016
Census Research Node: Data Integration, Online Data Collection, and Privacy Protection for Census 2020; \approx \$3,000,000
co-PI with S Fienberg (PI), W Eddy (PI), A Acquisti, J Kadane

Association for Women in Mathematics *Funded: March 2011 for use in August 2011*
Self-Tuning Diffusion Maps: Finding Local Cluster Structure while Reducing Dimensionality; research/travel grant: \$2000

The Royal Society of Edinburgh Summer 2008
Merging Clustering Methodologies for Visualization and Estimation of Group Structure
with Nema Dean, Department of Statistics, University of Glasgow
research/travel grant: \approx \$5500 (based on then conversion rate)

Carnegie Mellon University Summer Undergraduate Research Fellowship (*declined*) Summer 2008
Using Statistical Techniques to Improve Disease Classification
with Ryan Sieberg, Departments of Mathematics and Statistics, Carnegie Mellon University
research grant: \$3500

Department of Statistics, University of Montreal October 2007
research/travel grant: \$500

Teaching & Course Development

Department of Statistics, Carnegie Mellon University:

36-401 - Modern Regression Fall 2006-2011
undergraduate/master's linear regression/data analysis for majors in statistics, math, comp sci, etc.

36-490 - Undergraduate Research Spring 2011
undergraduate research projects; invitation-only course

36-315 - Statistical Graphics and Visualization Spring 2008-2011
undergraduate graphics/programming course for majors in statistics, math, comp sci, etc.

36-721 - Statistical Graphics and Visualization Fall 2010
PhD course for graduate students in statistics, computer science, machine learning

36-462 - Topics in Statistics: Statistical Learning Spring 2010
master's/senior undergraduate course in unsupervised, supervised learning

36-729 - Unsupervised Learning Fall 2009
PhD course for graduate students in statistics, computer science, machine learning

36-303 - Sampling, Survey, and Society Spring 2007
undergraduate course examining role of sampling and sample surveys in U.S. society

Department of Statistics, University of Washington:

Pre-Doctoral Lecturer - STAT 220: Basic Statistics Spring 2006
undergraduate introductory statistics course for non-math majors

Center for Statistics & Social Sciences, University of Washington:

Pre-Doctoral Lecturer - CS&SS 508: Introduction to R for Social Scientists Winter 2006
introductory programming course for social science graduate students

Instructor/Developer - CS&SS Math Camp Sept 2004, Sept 2005
Developer of one week intensive introduction to fundamental concepts of mathematics, probability, and statistics designed for graduate students in the social sciences
Author of all lecture and homework materials; <http://www.csss.washington.edu/MathCamp>

Consulting

Statistical analyses for law firm representing a global corporation Fall 2009 - present
Statistical design and analyses for a nationwide eldercare advisory service 2005, Fall 2008 - Fall 2009

Refereed Publications/Proceedings

- Nugent, R, Rinaldo, A, Singh, A, Wasserman, L. "Discussion on *Stability Selection* by Meinshausen and Bühlmann". *Journal of the Royal Statistical Society B* (2010), Vol 72, Part 4, p.465. (authorship in alphabetical order).
- Nugent, R, Dean, N, Ayers, E. "Skill Set Profile Clustering: The Empty K-Means Algorithm with Automatic Specification of Starting Cluster Centers". *Educational Data Mining 2010: 3rd International Conference on Educational Data Mining, Proceedings* (refereed). Baker, R.S.J.d., Merceron, A., Pavlik, P.I. Jr. (Eds.), p.151-160.
- Nugent, R, Stuetzle, W. "Clustering with Confidence: A Low-Dimensional Binning Approach". "*Classification as a Tool for Research*". *Proceedings of the 11th International Federation of Classification Societies Conference* (refereed), Herman Locarek-Junge, Claus Weihs (editors), University of Dresden, Germany, March 13-18, 2009. Springer-Verlag, Heidelberg-Berlin, 2010, p.117-126.
- Stuetzle W, Nugent R. "A Generalized Single Linkage Method for Estimating the Cluster Tree of a Density". *The Journal of Computational and Graphical Statistics*, 2010, Vol. 19, 2, p.397-418.
- Wang, H, Nugent, R, Nugent, C, Nugent, K, Phy, M. "A Commentary of the Use of the Internal Medicine In-Training Examination". *The American Journal of Medicine*. Vol 122, No 9, September 2009, p.879-883.
- Nugent, R, Ayers, E, Dean, N. "Conditional Subspace Clustering with Skill Mastery Information: Identifying Skills that Separate Students". *Educational Data Mining 2009: 2nd International Conference on Educational Data Mining, Proceedings* (refereed). Barnes, T., Desmarais, M., Romero, C., and Ventura, S. (Eds), Cordoba, Spain, July 1-3, 2009, p.101-110.
- Ayers, E., Nugent, R., Dean, N. "A Comparison of Student Skill Knowledge Estimates". *Educational Data Mining 2009: 2nd International Conference on Educational Data Mining, Proceedings* (refereed). Barnes, T., Desmarais, M., Romero, C., and Ventura, S. (Eds), Cordoba, Spain, July 1-3, 2009, p.1-10.
- Ayers, E, Nugent, R, Dean, N. "Skill Set Profile Clustering Based on Student Capability Vectors Computed from Online Tutoring Data". *Educational Data Mining 2008: 1st International Conference on Educational Data Mining, Proceedings* (refereed). R.S.J.d. Baker, T. Barnes, and J.E. Beck (Eds), Montreal, Quebec, Canada, June 20-21, 2008. p.210-217.
- Buscemi D, Kumar A, Nugent R, Nugent K. "Short Sleep Times Predict Obesity in Internal Medicine Clinic Patients". *Journal of Clinical Sleep Medicine*, Vol 3, No. 7. Dec 2007. p. 661-688.
- Glaser SL, Clarke CA, Keegan THM, Gomez SL, Nugent RA, Topol B, Stearns CB, Stewart SL. "Attenuation of social class and reproductive risk factors for Hodgkin lymphoma due to selection bias in controls". *Cancer Causes Control*: 2004; 15:731-9.
- Glaser SL, Clarke CA, Nugent RA, Stearns CB, Dorfman RF. "Reproductive Factors in Hodgkin's disease in women". *American Journal of Epidemiology*: 2003; 158(6):553-563.
- Glaser SL, Clarke CA, Nugent RA, Dorfman RF, Stearns CB. "Social class and risk of Hodgkin's disease in young adult women in 1988-94". *International Journal of Cancer*: 2002; 98(1):110-17.

Submitted/In Revision Manuscripts

- Rinaldo, A, Singh, A, Nugent, R, Wasserman, L. "Stability of Density-Based Clustering". Accepted to *Journal of Machine Learning Research*. September 2011. <http://arxiv.org/abs/1011.2771>
- Ayers, E, Rabe-Hesketh, S, Nugent, R. "Incorporating Student Covariates in Cognitive Diagnosis Models". Accepted to *Journal of Classification*. In revision, June 2011.
- Nourbaksh, E., Nugent, R., Wang, H., Cevik, C., and Nugent, K. "Medical Literature Searches: PubMed Central or Google Scholar". Submitted to *Health Information and Libraries Journal*. Invited revise and resubmit, August 2011.
- Friedenberg, D and Nugent, R. "Exploration of the Use of a Self-Tuning Diffusion Map Framework". Submitted to the *International Statistical Institute Proceedings (2011)* (invited). May 2011.
- Dean, N and Nugent, R. "Comparing Different Clustering Methods on the Unit Hypercube". Submitted to the *International Statistical Institute Proceedings (2011)* (invited). May 2011.

Manuscripts in Progress

- "A Self-Tuning Diffusion Map Framework for Document Clustering." Invited submission for WIREs Computational Statistics. *with D Friedenberg*
- "A Statistical Comparison of Inventor-Patent Disambiguation Algorithms Applied to the Optoelectronics Industry." *with S Ventura, E Fuchs*
- "The Impact of Offshoring on the Technology Trajectories of Firms versus Individuals: The Case of Optoelectronic Component Manufacturers for Telecommunications." *with E Fuchs, C Yang*

“A Minimum Density Linkage Method to Visualize High-Dimensional Density Estimates and their Hierarchical Cluster Structure” *with N. Dean*

“Mixture Model Component Trees: Visualizing the Hierarchical Structure of Complex Groups” *with N. Dean*

“Effect of age on the strength of association between sleep duration and body mass index in the pediatric population”
A Althouse, Y Yaqub, M Hall, K Nugent, R Raj

“Cluster-Based Modeling: Exploring the Linear Regression Model Space” *with X. Shen, R. Steele*

“Finding a Minimal Spanning Tree with Unknown Edge Weights” *with W. Stuetzle*

Book Chapters

Ngamruengphong, S, Nugent, A, Nugent, K, Nugent, R. (authorship in alphabetical order) “Case 49: Prostate-Ca-Survival”.
Case Files: Geriatrics (LANGE Case Files), Andrew Dentino, MD (editor). McGraw-Hill Medical. Forthcoming (2012).

Nugent, R and Meila, M. “An Overview of Clustering Applied to Molecular Biology”.
Statistical Methods in Molecular Biology. Springer/Humana Press, 2010.

Talks and Seminars (*slated/upcoming in italics*)

U of Guelph Dept of Mathematics & Statistics Ontario, Canada November 2011

Invited Seminar: *A Self-Tuning Diffusion Map Framework for Use in Document Clustering*

U of Chicago Booth School of Business Chicago, IL September 2011

Invited Seminar: *A Self-Tuning Diffusion Map Framework for Use in Document Clustering*

International Federation of Classification Societies 2011 Meetings Frankfurt, Germany August 2011

Invited Talk: *Estimating and Visualizing Cluster Structure in a Constrained Hypercube as a Proxy for Cognitive Diagnosis Models*

International Statistical Institute 2011 Meetings Dublin, Ireland August 2011

Invited Talk: *Using Self-Tuning Diffusion Maps to Reduce Dimensionality and Find Cluster Structure*

Joint Statistical Meetings - JSM 2011 Miami Beach August 2011

Topic-Contributed: *Incorporating a Self-Tuning Diffusion Map Framework into Document Clustering*

Model-based Clustering Working Group Glasgow, Scotland July 2011

Invited Short Talk: *Model-Based Clustering in a Diffusion Map Framework*

International Classification Conference 2011 St Andrews, Scotland July 2011

Invited Talk: *Clustering Students by Their Skill Set Profiles on the Unit Hypercube*

City University of New York Graduate School (honorarium recipient) June 2011

Invited Talk: *An Overview of Assistsments:Providing Diagnostic Feedback using Modern Clustering Methods*

Southern Society for Clinical Investigation Meetings New Orleans, LA February 2011

Talk: *How is Quality of Sleep Associated with Quantity of Sleep?*

Model-based Clustering Working Group Grenoble, France July 2010

Invited Talk: *Estimating a Mixture of Latent Class Trajectories in the Presence of Missing/Censored Observations*

75th Annual Meetings of the Psychometric Society (IMPS 2010) Atlanta, GA July 2010

Contributed Talk: *Empty K-Means: A Flexible Skill Set Profile Clustering Method*

International Conference on Educational Data Mining (EDM 2010) Pittsburgh, PA June 2010

Accepted Paper/Invited Talk: *Skill Set Profile Clustering: The Empty K-Means Algorithm with Automatic Specification of Starting Cluster Centers*

American Educational Research Association Meetings (AERA 2010) Denver, CO May 2010

Invited Talk: *Providing Diagnostic Feedback using Modern Clustering Methods in the Assistent Project*

Southern Society for Clinical Investigation Meetings New Orleans, LA February 2010

Talk: *Characterizing the Longitudinal Performance of Internal Medicine Residency Programs with the In-Training Examination*

Center for Statistics & Social Sciences, University of Washington Seattle, WA January 2010

Invited Seminar: *Mixture Model Component Trees as an Alternative to High-Dimensional Cognitive Diagnosis Models*

Department of Statistics, Iowa State University Ames, IA October 2009

Invited Seminar: *Mixture Model Component Trees: Finding and Visualizing Hierarchical Component Structure (with Applications in Cognitive Diagnosis)*

Joint Statistical Meetings - JSM 2009 Washington, D.C. August 2009

Contributed Talk: *Cluster-Based Modeling: Exploring the Linear Regression Model Space*

International Meeting of the Psychometric Society - IMPS09 Cambridge, UK	July 2009
Invited Talk: <i>Finding and Visualizing Hierarchical Cluster Structure as an Alternative to Cognitive Diagnosis Models</i>	
Working Group on Model-Based Clustering Paris, France	July 2009
Invited (Long) Talk: <i>Mixture Model Component Trees: Visualizing the Hierarchical Component Structure of Complex Groups</i>	
SAMSI Cognitive Diagnosis Modeling Working Group Research Triangle Park, NC	July 2009
Invited Talk: <i>Clustering in Cognitive Diagnosis: Some Recent Work and Open Questions</i>	
23rd Annual Meeting of Associated Professional Sleep Societies - Sleep 2009 Seattle, WA	June 2009
Poster: <i>Finding the "Important" Structure in a Corpus of Sleep Habit Questionnaires</i>	
International Federation of Classification Societies 2009 Meetings Dresden, Germany	March 2009
Talk: <i>Clustering with Confidence: How Significant are Your Clusters?</i>	
Southern Society of General Internal Medicine Meetings New Orleans, LA	February 2009
Contributed Talk: <i>Analysis of Content Mastery on the Internal Medicine Training Examination</i>	
RAND Statistics Seminar Series , Pittsburgh, PA	November 2008
Invited Seminar: <i>Visualizing Hierarchical Cluster Structure via Density-Based Linkage Methods and Component Trees</i>	
Department of Statistics, University of Glasgow , Scotland	August 2008
Invited Seminar: <i>Cluster Tree Estimation using a Generalized Single Linkage Method (and Extensions)</i>	
German Classification Society 32nd Annual Conference Hamburg, Germany	July 2008
(joint with British Classification Society and the Dutch/Flemish Classification Society)	
Contributed Talk: <i>Cluster Tree Estimation using a Generalized Single Linkage Method</i>	
International Symposium on Business and Industrial Statistics Prague, Czech Republic	July 2008
Invited Talk: <i>Finding and Visualizing the Hierarchical Cluster Structure in Data</i>	
Classification Society of North America 2008 Meetings St Louis, MO	June 2008
Invited Talk: <i>Visualizing Hierarchical Cluster Structure via Linkage Algorithms</i>	
40th Symposium on the Interface: Computing Science and Statistics Durham, NC	May 2008
Contributed Talk: <i>Clustering with Confidence: A Binning Approach</i>	
Southern Society of General Internal Medicine Meetings New Orleans, LA	February 2008
Invited Symposium: <i>A Review of Clustering, Classification, and Regression Analysis in Biomedical Research</i>	
Le Colloque de Statistique de Montreal - joint seminar of Montreal statistics departments	November 2007
Invited by Department of Mathematics and Statistics, University of Montreal	
Invited Seminar: <i>Visualization of Clusters Via a Density-Based Similarity Measure</i>	
Joint Statistical Meetings - ASA Section on Statistical Computing Salt Lake City, UT	August 2007
Contributed Talk: <i>Presence vs. Significance: How Significant are Your Clusters?</i>	
Working Group on Model-Based Clustering, Trinity College Dublin, Ireland	July 2007
Invited (Short) Talk: <i>Visualization of Clusters Via a Density-Based Similarity Measure</i>	
Classification Society of North America Meetings Urbana-Champaign, IL	June 2007
Contributed Talk: <i>Visualization of Clusters Via a Density-Based Similarity Measure</i>	
Department of Mathematics, Grinnell College Grinnell, IA	March 2007
Invited Lecture: <i>Intro to Clustering</i>	
Department of Statistics, University of Pittsburgh	November 2006
Invited Lecture: <i>Overview of Clustering Gene Expression Data</i>	
Joint Statistical Meetings - ASA Section on Statistical Computing Seattle, WA	August 2006
Topic-Contributed Talk: <i>Clustering with Confidence</i>	
Session: Winners of the 2005 Statistical Computing and Graphics Student Paper Competition	
Joint Statistical Meetings - ASA Section on Statistical Computing Seattle, WA	August 2006
Invited Talk: <i>Generalized Single Linkage Clustering</i> ; Session: Density-based Clustering	
<i>Note: ASA rules prohibited giving both talks; Werner Stuetzle presented this work in my place</i>	
Department of Statistics, Carnegie Mellon University Pittsburgh, PA	March 2006
Invited Seminar: <i>Clustering with Confidence</i>	
Southern Society of General Internal Medicine Meetings	March 2006
Contributed Talk (not speaker): <i>The Association Between Sleep Time and Body Mass Index in Clinic Patients</i>	
Department of Statistics, University of Pittsburgh	February 2006
Invited Seminar: <i>Clustering with Confidence</i>	
Texas Tech Health Sciences Center, Department of Internal Medicine Lubbock, TX	March 2005
Invited Talk: <i>A Statistical Overview of "Combination of Isosorbide Dinitrate and Hydralazine in Blacks with Heart Failure"</i>	

Texas Tech Health Sciences Center, Department of Internal Medicine Lubbock, TX June 2004
 Invited Talk: *The Metabolic Syndrome and Chronic Kidney Disease in U.S. Adults: Statistical Analysis*
 Department of Biostatistics, University of Washington January 2004
 Student Seminar: *Clustering With Confidence: Overview of Current Clustering Methods - How Well Do They Do?*

Advising/Supervising

Ph.D. Thesis Committees:

Gabrielle Flynt, Department of Statistics, Carnegie Mellon University
Clustering Longitudinal Trajectories in the Presence of Informative Monotone Missingness
 Casey Studer, Department of Statistics, Carnegie Mellon University
Incorporating Learning Over Time into the Cognitive Assessment Framework
 Joseph Richards, Department of Statistics, Carnegie Mellon University
Fast and Accurate Estimation for Astrophysical Problems in Large Databases Graduated: July 2010
 David Friedenberg, Department of Statistics, Carnegie Mellon University
Adaptive Cluster Detection Graduated: May 2010
 Elizabeth Ayers, Department of Statistics, Carnegie Mellon University
Predicting Performance and Scaling Up Estimates of Student Skill Knowledge Graduated: May 2010

Undergraduate Honors Thesis:

Yi Xiang Chong, Department of Mathematics and Statistics, Carnegie Mellon University 2011-2012
Title TBA
 Christopher Peter Makris, Department of Statistics, Carnegie Mellon University Graduated: May 2011
Exploration of Imputation Methods for Missingness in Image Segmentation
 Andrew Klein, Departments of Information Systems, Statistics, Carnegie Mellon University Graduated: May 2011
Semi-automated Collection of Pitch Location and Intent in Baseballs (co-advised)

Projects: (grouped by general topic)

Inventor/Patent Disambiguation in the Optoelectronic Industry Summer 2010 - present
 graduate research (PhD); Department of Statistics, Carnegie Mellon University
 joint project with Department of Engineering & Public Policy, CMU
The Impact of Offshoring on Firm vs. Individual Technology Trajectories in Optoelectronics Summer 2010 - present
 graduate research (PhD): Department of Engineering & Public Policy, CMU
 undergraduate independent study: Department of Statistics, CMU
Analyzing Online Networks of Educators; (Streaming) Topic Detection/Clustering Fall 2008 - Spring 2009
 graduate research (PhD); Department of Statistics, CMU
Exploring the Linear Regression Model Space: Cluster-Based Modeling Fall, Summer 2008
 graduate research (Master's); Department of Elec & Comp Engineering, CMU
 undergraduate independent study; Department of Statistics, CMU
Clustering/Visualization with a Density-based Similarity Measure Spring 2007
 NSF-VIGRE sponsored undergraduate research; Department of Statistics, CMU
Characterizing the Quantity and Perceived Quality of Sleep in a Health Care Student Population; Fall 2010 - Winter 2011
 undergraduate independent study; Department of Statistics, CMU
 H. Pileggi, R. Nugent, D. Buscemi, K. Nugent, R. Raj, *Journal of Investigative Medicine*, Vol. 59, 2, Abstract 424, February 2011
Characterizing Performance of Medical Residency Programs Summer 2009
 summer research; Dept of Statistics, CMU
Finding the "Important" Structure in a Corpus of Sleep Habit Questionnaires Fall 2008
 undergraduate independent study; Department of Statistics, CMU
Modeling the Relationship Between Sleep Characteristics and Pediatric Obesity
 undergraduate independent study; Department of Statistics, CMU Spring 2008
 NSF-VIGRE sponsored undergraduate research Summer 2007
 A. Althouse, R. Nugent, Y. Yaqub, R. Corona, W.M. Hall, K. Nugent, R. Raj, *Journal of Investigative Medicine*, Vol. 56, Abstract 258, 2008.

Exploring Missingness in and Design of Sleep Routine and Daily Habits Questionnaires NSF-VIGRE sponsored undergraduate research; Department of Statistics, CMU	Fall 2007
Obesity and Adolescents undergraduate data analysis project (4); Department of Statistics, CMU	Spring 2007
Utility of Pulmonary Function Testing: A Comparison of Learning Methods undergraduate independent study; Department of Mathematical Sciences, CMU	Spring 2008
Pulmonary Function Testing: Exploring Mid-flow Time undergraduate data analysis project (2); Department of Statistics, CMU	Spring 2007

Professional Societies

Institute of Mathematical Statistics	2003 - present
American Statistical Association	2007 - present
Classification Society of North America	2005 - present
Interface Foundation of North America	2008 - present
Psychometrics Society	2010 - present
International Educational Data Mining Society	2011 - present

Professional Service

Classification Society	
President-Elect	Jan 2010-Jan 2012
Co-organizer, Classification Society 2011, 2012 Annual Meetings	2010-2012
Representative to the International Federation of Classification Societies	2010-present
Board of Directors	Jan 2008-Jan 2010
Dissertation Award Committee	2009 - present
American Statistical Association	
President: Pittsburgh ASA Chapter	2011-2012
Publications Officer, Section on Statistical Graphics	2012
Journal of Computational & Graphical Statistics , Associate Editor	Fall 2011- present
Journal of Educational Data Mining , Guest Editor, Special Issue	2011
Reviewer	
NSF, Statistics in Medicine, JRSS-B, Psychometrika, World Scientific Publishing, Journal of Computational and Graphical Statistics, Statistics in Computing, Journal of Machine Learning Research, AISTATS (2010, 2012), EURASIP IVP, Journal of Classification, Computational Statistics and Data Analysis, Statistical Analysis and Data Mining, Journal of Statistical Software	
Young Statistician's Meeting (YSI) - Satellite of the 58th ISI World Congress Meeting	2011
Scientific Program Committee	
International Federation of Classification Societies 2011 Meeting: Scientific Committee	2010-2011
University of Washington Working Group on Model-Based Clustering: Organizing Committee	Summer 2011
Interface Foundation of North America 2010 Meetings: Organization Committee	2009-2010
AISTAT 2009: 12th International Conference on Artificial Intelligence and Statistics, Area Chair	2009
Session Organizer/Chair	
Classification Society of North America Meetings (<i>Invited</i>)	2008-2011
Joint Statistical Meetings (<i>Contributed</i>)	2006, 2007, 2009, 2011
Student Volunteer Coordinator - ACM SIGKDD conference	August 2004

Departmental and University Service

Carnegie Mellon University:

Undergraduate Research Office Grant/Fellowship Committee	Fall 2010 - present
Andrew Carnegie Society Scholar Selection Committee	Fall 2011 - present
Senior Capstone Seminar - facilitator; discussant	Fall 2008
<i>Department of Statistics:</i>	
(Interim) Director of Undergraduate Studies	Fall 2010 - Summer 2011
Undergraduate Curriculum Committee	Fall 2009 - present
Chair	Fall 2010 - Spring 2011
Undergraduate Research	Fall 2009 - present
Master's Applied Data Analysis Qualifier Committee	Spring 2011

CMART Management Committee Carnegie Mellon & RAND Traineeships in Methodology and Interdisciplinary Research program	Winter 2010 - present
Professional Master's Graduate Program Committee program development, admissions, etc	Fall 2008 - Summer 2011
Teaching Teas - chair; organizer of colloquia focusing on departmental teaching	Fall 2007 - Summer 2008
Seminar Committee ; co-organizer of weekly seminars	Fall 2006 - Fall 2007

University of Washington:

Unsupervised Learning Working Group Co-organizer of weekly research working group http://www.stat.cmu.edu/~rnugent (under Research)	August 2003 - June 2006
Statistics Tutor & Study Center Department of Statistics, University of Washington, Seattle, WA Co-founder and student director of pilot program providing free statistics tutoring and study space; employed graduate students to tutor introductory statistics courses Center is still in operation. http://www.stat.washington.edu/tutorcenter	Spring 2003 - Winter 2005
Informal Student Seminar organizer of weekly seminar on graduate student departmental research and/or practice talks	Spring 2004

Rice University:

Rice Admission Office Senior and Alumni Interviewer	Sept 1998 - June 2001
College Master Search Committee	1995

Languages

English (native language), Spanish (high proficiency, both verbal and written)

Computer Languages/Applications

C, Java, Matlab, Splus, R, SAS, Systat, Minitab, Microsoft Applications, Pagemaker

Community Service

Carnegie Mellon University Club Sports Coach	2007-present
Seattle Girls' School Head Cross Country Coach: 5th-8th grades Service Award from the SGS Board (2005)	(Fall only) 2002 - 2005
Girls on the Run Race Coordinator and Volunteer; Coach for the Spring 2003 Program Mentor/Running partner for girls age 9-13	Spring 2003 - Summer 2006