Dr. Michael D. Ernst

140 Engineering & Computing Center
Department of Mathematics & Statistics
St. Cloud State University
720 Fourth Avenue South
St. Cloud, Minnesota 56301-4498

Phone: (320) 308–2175
E-mail: mdernst@stcloudstate.edu
Web: http://web.stcloudstate.edu/mdernst
Twitter: @DrMichaelErnst

Education

Ph.D., Statistical Science (1997), Southern Methodist University, Dallas, Texas
- Dissertation: "Permutation Tests of Bivariate Interchangeability"
- Major Advisor: Dr. William R. Schucany

M.S., Statistical Science (1994), Southern Methodist University, Dallas, Texas

B.A., Mathematics and Statistics (1992), St. Cloud State University, St. Cloud, Minnesota
- *Summa Cum Laude*, Minor in Music

Research Interests

Nonparametric Statistics
- Permutation and Resampling Methods
- Bootstrap Methods
- Univariate and Multivariate Rank Tests

Statistical Computing, Graphics and Visualization

Statistics Education

Applied Statistics
- Biostatistics
- Statistical Consulting

Professional Experience

Professor with tenure, Department of Mathematics and Statistics, St. Cloud State University, 2016–Present

Associate Professor with tenure, Department of Mathematics and Statistics, St. Cloud State University, 2013–2016

Associate Professor with tenure, Department of Information Systems, Herberger Business School, St. Cloud State University, 2011–2013

Associate Professor, Department of Information Systems, G.R. Herberger College of Business, St. Cloud State University, 2006–2011

Associate Professor with tenure, Department of Mathematical Sciences, Indiana University–Purdue University Indianapolis, 2005–2006

Assistant Professor, Department of Mathematical Sciences, Indiana University–Purdue University Indianapolis, 1999–2005

Visiting Research Assistant Professor, Division of Biostatistics, Department of Statistics, University of Florida, 1997–1999

Adjunct Instructor, Edwin L. Cox School of Business, Southern Methodist University, Summer 1996

Teaching Associate, Department of Statistical Science, Southern Methodist University, Summer 1993 & Spring 1996

Teaching Assistant, Department of Statistical Science, Southern Methodist University, 1992–1997

Data Manager/Analyst, Texas Transportation Institute, Summer 1993

Actuarial Intern, Lutheran Brotherhood Securities Corporation, Summer 1991

Tutor, Math Skills Center, St. Cloud State University, 1988–1992

REFEREED PUBLICATIONS

1. **Ernst, M. D.** (2012), "Active Learning? Not With My Syllabus!," *Teaching Statistics*, **34**, 21–24.
2. **Ernst, M. D.** (2009), "Teaching Inference for Randomized Experiments," *Journal of Statistics Education*, **17(1)**, http://www.amstat.org/publications/jse/v17n1/ernst.html.
3. **Ernst, M. D.** (2004), "Permutation Methods: A Basis for Exact Inference," *Statistical Science* (invited), **19**, 676–685.
4. Mortelé, K. J., Mergo, P. J., Taylor, H. M., Wiesner W., Cantisani V., **Ernst, M. D.**, Kalantari B. N., and Ros, P. R. (2004), "Peripancreatic vascular abnormalities complicating acute pancreatitis: contrast-enhanced helical CT findings," *European Journal of Radiology*, **52**, 67–72.
5. **Ernst, M. D.** and Hutson, A. D. (2003), "Utilizing a Quantile Function Approach to Obtain Exact Bootstrap Solutions," *Statistical Science* (invited), **18**, 231–240.
6. Berger, V. W., Lunneborg, C., **Ernst, M. D.**, and Levine, J. G. (2002), "Parametric Analyses in Randomized Clinical Trials," *Journal of Modern Applied Statistical Methods*, **1**, 74–82.
7. Mortelé, K. J., Mergo, P. J., Taylor, H. M., **Ernst, M. D.**, and Ros, P. R. (2001), "Splenic and perisplenic involvement in acute pancreatitis: determination of prevalence and morphologic helical CT features," *Journal of Computer Assisted Tomography*, **25**, 50–54.
8. Mortelé, K. J., Mergo, P. J., Taylor, H. M., **Ernst, M. D.**, and Ros, P. R. (2000), "Renal and perirenal space involvement in acute pancreatitis: spiral CT findings," *Abdominal Imaging*, **25**, 272–278.
9. Lopez, J. G., **Ernst, M. D.**, and Wright, T. W. (2000), "Acromioplasty: Comparison of Outcome in Patients With and Without Workers' Compensation," *Journal of the Southern Orthopaedic Association*, **9**, 262–266.
10. Hutson, A. D. and **Ernst, M. D.** (2000), "The Exact Bootstrap Mean and Variance of an L-estimator," *Journal of the Royal Statistical Society, Series B*, **62**, 89–94.
11. **Ernst, M. D.** and Schucany, W. R. (1999), "A Class of Permutation Tests of Bivariate Interchangeability," *Journal of the American Statistical Association*, **94**, 273–284.
12. **Ernst, M. D.** (1998), "A Multivariate Generalized Laplace Distribution," *Computational Statistics*, **13**, 227–232.
13. **Ernst, M. D.**, Guerra, R., and Schucany, W. R. (1996), "Scatterplots for Unordered Pairs," *The American Statistician*, **50**, 260–265.
14. **Ernst, M. D.** and Kepner, J. L. (1993), "A Monte Carlo Study of Rank Tests for Repeated Measures Designs," *Communications in Statistics — Simulation and Computation*, **22**, 671–678.

PROCEEDINGS AND TECHNICAL REPORTS

15. **Ernst, M. D.** and Hutson, A. D. (1999), "Exact Bootstrap Moments of an L-estimator," *American Statistical Association Proceedings of the Section on Statistical Computing*.
16. **Ernst, M. D.** and Hutson, A. D. (1999), "Exact Bootstrap Moments of an L-estimator," *Computing Science & Statistics. Models, Predictions, and Computing. Proceedings of the 31st Symposium on the Interface*, 468–474.
17. Hutson, A. D. and **Ernst, M. D.** (1998), "The Exact Bootstrap Percentiles of a Function of Order Statistics," Technical Report 582, University of Florida, Department of Statistics.
18. Hutson, A. D. and **Ernst, M. D.** (1998), "The Exact Bootstrap Mean and Variance of an L-estimator," Technical Report 574, University of Florida, Department of Statistics.

REVIEWS AND COMMENTS

19. **Ernst, M. D.** (2005), "Review of *Nonparametric Statistical Inference, 4th ed., Revised and Expanded*, by J. D. Gibbons and S. Chakraborti," *Journal of Quality Technology*, **37**, 176–177.
20. **Ernst, M. D.** (2000), "Review of *Nonparametric Statistical Methods, 2nd ed.*, by M. Hollander and D. A. Wolfe," *Journal of the American Statistical Association*, **95**, 333.

TEACHING EXPERIENCE

St. Cloud State University

- *Business Statistics*, BCIS/IS/STAT 242 (Fall 2006; Spring, Summer, Fall 2007; Spring, Fall 2008; Spring, Summer, Fall 2009; Spring, Summer, Fall 2010; Spring, Summer, Fall 2011; Spring, Summer 2012; Fall 2013; Spring, Fall 2014; Spring, Summer, Fall 2015)
- *Statistics for the Biological and Physical Sciences*, STAT 239 (Fall 2015)
- *Regression and Analysis of Variance I*, STAT 321 (Spring, Fall 2015)
- *Nonparametric Statistics*, STAT 433 (Fall 2014)
- *Basic Elements of Probability Theory*, STAT 447 (Fall 2013)
- *Basic Elements of Statistical Theory*, STAT 448 (Spring 2014)
- *Independent Study*, MBA 600 (Fall 2012)
  - Matthew Hammer, "Modeling Special Education Funding"

Indiana University–Purdue University Indianapolis

- *Elementary Statistical Methods I*, STAT 301 (Fall 1999; Summer, Fall 2000; Spring, Summer, Fall 2001; Spring, Summer, Fall 2002; Spring 2003; Spring 2006)
- *Probability*, STAT 416 (Fall 2003; Fall 2004)
- *Statistical Theory*, STAT 417 (Spring 2004; Spring 2005)
- *Undergraduate Topics in Statistics*, STAT 490
  - Elizabeth Anker (Spring 2000), Independent Study
- *Capstone Experience*, MATH 492
  - Vasco Epps (Spring 2005), "An Introduction to Nonparametric Methods"
  - Jeff Kirkpatrick (Spring 2005), "An Introduction to SAS"
  - Emily Puntenney (Fall 2005), "Design, Collection and Analysis of a Survey"
  - Brad Meadows (Spring 2006), "An Introduction to SAS"
- *Statistical Methods I*, STAT 511 (Fall 1999; Spring 2000)
- *Applied Regression Analysis*, STAT 512 (Fall 2003)
- *Basic Probability and Applications*, STAT 516 (Fall 2003; Fall 2004)
  - Emily Puntenney (Fall 2004), Honors Project
- *Statistical Inference*, STAT 517 (Spring 2004; Spring 2005)
- *Introduction to Probability*, STAT 519 (Fall 2004; Fall 2005)
- *Statistical Computing*, STAT 521 (Spring, Fall 2000; Fall 2001; Fall 2002; Summer 2004)
  - Developed as a new course in Spring 2000
- *Mathematical Statistics*, STAT 528 (Spring 2005; Spring 2006)
- *Nonparametric Statistics*, STAT 533 (Spring 2001; Spring 2002; Spring 2003; Spring 2004; Fall 2005)
- *Graduate Student Seminar*, STAT 598 (Fall 2001; Spring, Fall 2002; Spring, Fall 2003; Spring, Fall 2004)

University of Florida

- *Introduction to Statistics*, Honors Section, STA 2023 (Fall 1998)

Southern Methodist University

- *Managerial Statistics*, MIS 6301 (Summer 1996)
- *Introduction to Statistics*, STAT 1301 (Spring 1996)
- *Introduction to Statistical Methods*, STAT 2331 (Summer 1993)
- Teaching Assistant, Department of Statistical Science (1992–1997)

St. Cloud State University

- Tutor, Math Skills Center (1988–1992)

PROFESSIONAL ACTIVITIES

- Member, American Statistical Association (ASA), 1993–Present
  - Member, ASA Noether Award Committee, 2000–2004
  - Member, ASA Section on Nonparametric Statistics, 2000–Present
    (Co-Founder, 1999; Treasurer, 2000; Secretary, 2001)
  - Member, ASA Section on Statistical Computing, 1996–2007
  - Member, ASA Section on Statistical Education, 1996–Present
  - Member, ASA Section on Statistical Graphics, 1996–2007
- Member, International Statistical Institute, 2008–Present
  - Member, International Association for Statistical Education, 2008–Present
- Associate Editor and Editorial Board Member, `CAUSEweb.org` (Consortium for the Advancement of Undergraduate Statistics Education), 2009–2014
- Peer reviewer for `MERLOT.org` (Multimedia Educational Resource for Learning and Online Teaching), 2010–2014
- Presented "Technology in the classroom: Using clickers" for the G.R. Herberger College of Business brown bag luncheon series, Novermber 10, 2009
- External Examiner, Ph.D. Committee for Cathy Poliak, Department of Mathematical Sciences, Northern Illinois University, 2007
- Co-organizer, *University of Florida Statistics Symposium on Selected Topics in Nonparametric Methods*, Gainesville, Florida, January 22–23, 1999
- Faculty Consultant to the College Board for the Advanced Placement Statistics Exam
  - Table Leader: 2000, 2004, 2005, 2007, 2008, 2009, 2011
  - Reader: 1998, 1999, 2003
- Session Chair: *1997 Joint Statistical Meetings*, Dallas, Texas
- Book Reviewer: *Academic Press*, *Atomic Dog Publishing*, *Chapman & Hall*, *McGraw-Hill*, *Springer-Verlag*, *Pearson*, *John Wiley & Sons*
- Journal Referee: *Communications in Statistics — Theory and Methods*, *Communications in Statistics — Simulation and Computation*, *Computational Statistics and Data Analysis*, *Journal of Computational and Graphical Statistics*, *Journal of Multivariate Analysis*, *Journal of Nonparametric Statistics*, *Journal of Statistical Computation and Simulation*, *Journal of Statistical Planning and Inference*, *Journal of Statistics Education*, *Statistical Science*, *Statistics in Medicine*, *Journal of the American Society of Nephrology*, *Medical and Pediatric Oncology*, *Occupational Therapy in Mental Health*

GRANTS AND FELLOWSHIPS

1. **Ernst, M. D.**, Principal Investigator (2014), "Developing Degrees in Data Science and Data Analytics," St. Cloud State University Provost Action Grant, $10,000, funded.
2. **Ernst, M. D.**, Principal Investigator (2014), "Upgrading the Mathematics and Statistics Computer Classroom for Active Statistics Instruction," St. Cloud State University Provost Action Grant, $10,000, funded.
3. **Ernst, M. D.**, Principal Investigator (2011), "Efficient Computation of Permutation-Based Confidence Intervals," St. Cloud State University New Researcher Award, $4,000, not funded.
4. **Ernst, M. D.**, Team member (2009), "Rural Minnesota Mathematics Partnership," National Science Foundation, 7/1/2010–6/30/2015, not funded (PI: Sonja Goerdt, Mathematics).
5. **Ernst, M. D.**, Principal Investigator (2008), "Purchase of the *Item Information Analysis Report* for the ETS Major Field Test in Business," St. Cloud State University Assessment Grant, $400, funded.
6. **Ernst, M. D.**, Co-Principal Investigator (2004), "Improving Statistical Detection of Item Bias in Social Behavioral Measures," National Science Foundation, 9/1/2004–8/31/2006, $488,796, not funded (PI: Patrick Monahan, Biostatistics).
7. **Ernst, M. D.**, Co-Investigator (2003), "Monitor and manipulate orthodontic force system," National Institutes of Health, 7/1/2004–6/30/2007, $564,375, not funded (PI: Jie Chen, Mechanical Engineering).

8. **Ernst, M. D.** (2003), "Exact Inference for Non-Standard Designs using Permutation Tests," *Proposal Development and Grant Writing Fellowship*, IUPUI Office of Professional Development, $6,000, funded.
9. **Ernst, M. D.** (2002), "Exact Bootstrap Moments and Percentiles of a Function of Order Statistics," *Summer Research Fellowship*, IUPUI Office of Professional Development, $6,000, funded.
10. **Ernst, M. D.** (2001), "Exact Bootstrap Moments and Percentiles of a Function of Order Statistics," *Purdue Research Foundation Summer Faculty Grant*, $6,000, not funded.
11. **Ernst, M. D.** (2000), "International Conference on Order Statistics and Extreme Values – Theory and Applications," *Overseas Conference Fund*, Indiana University Office of International Programs, $800, funded.
12. **Ernst, M. D.** and Podgórski, K. (1999), "Proposal for a Statistical Consulting Laboratory," *Incentive Fund for Curricular Innovation and Improvement*, IUPUI School of Science, $17,000, funded.

UNIVERSITY SERVICE

St. Cloud State University

- University Curriculum Committee, 2015–Present
- Strategic Planning Committee, 2010–2012
- Search Committee, Associate Provost for Research and Dean of Graduate Education, 2010–2011
- Faculty Senate, 2013–Present
- CoSE Curriculum Committee, 2013–Present
- Ad Hoc Adjunct Support Committee, 2015
- CoSE Women Engaged in STEM initiative, 2015–Present
- Math/Stat Curriculum Committee, 2013–Present
- Math/Stat Statistics Committee, 2013–Present
  - Committee Chair, 2013–Present
- Math/Stat Search Committee
  - Statistics Fixed-Term Position(s), 2013, 2014 (chair)
  - Statistics Probationary Position, 2015–2016
- Co-Organizer, Math/Stat Department Colloquium Series, 2014–2016
- HBS Assessment Working Group/Circle of Interest, 2006–2012
  - Collaboration Goal Assessment Team Chair, 2009–2012
  - IS Department Assessment Coordinator, 2006–2012
- HBS Technology Roundtable, 2006–2009
- HBS Honors Working Group, 2006–2007
- HBS Student Evaluation Working Group, 2007–2008
- HBS Online Education Task Force, 2009–2011
- IS Department Faculty Research Committee, 2008–2012
- IS Department Faculty Search Committee, 2008–2012
- Course Coordinator, BCIS/IS 242, 2008–2013
- Co-Advisor, BCIS Student Club, 2006–2009
- Advisor for Data Analytics Competition student team, 2014–Present
- Advisor for 25 Intended IS majors, 2006–2013
- Advisor for 15 Intended Statistics majors, 2013–Present
- Graduate Committee Member
  - Quyen Duong, M.S. in Applied Statistics, Department of Mathematics & Statistics, 2012–2013
  - Al Greene, M.S. in Applied Statistics, Department of Mathematics & Statistics, 2015
  - Lina Wang, M.S. in Biological Sciences, Department of Biology, 2015–2017

Indiana University–Purdue University Indianapolis

- IUPUI Faculty Council Committee on Technology, 2004–2006
- School of Science Technology Committee, 2001–2006
- Department of Mathematical Sciences Technology and Equipment Committee, 1999–2006

  - Chair, 2001–2006
- Department of Mathematical Sciences Undergraduate Curriculum Committee, 2001–2006
- Department of Mathematical Sciences Search and Screen Committee, 2003–2006
- Course Coordinator, STAT 301, Department of Mathematical Sciences, 2000–2006
- Comprehensive Examination Committee Member for 45 students, M.S. Degree in Applied Statistics, Department of Mathematical Sciences, 1999-2006

CONSULTING EXPERIENCE

Statistical Consulting Lab, Indiana University–Purdue University Indianapolis, 1999–2006
- Helped start the statistical consulting lab in the Department of Mathematical Sciences to service students and faculty on campus, as well as individuals and companies in the Indianapolis area.

Biostatistics Consulting Lab, University of Florida, 1997–1999
- Helped run the consulting lab in the Division of Biostatistics providing statistical consulting to individual members of the University of Florida Health Science Center, as well as members of the community.

Consulting Statistician, University of Florida Department of Orthopaedics, 1997–1999
- Provided statistical consulting for members of the University of Florida Department of Orthopaedics and thesis advice and help to graduate students in the Department of Exercise and Sport Sciences.

COLLABORATIVE PROJECTS

School District Testing Data, St. Cloud State University, 2014–Present
- Co-organized a group of students and faculty working with representatives of the St. Cloud and Princeton school districts on evaluating student standardized testing data.

Hampton Oaks Sports Medicine Clinic, University of Florida, 1997–1999
- Member of a research team investigating various causes of sports injuries. Provided statistical analyses as well as advice on project design, data collection methods, and data management.

Dose Response to Exercise and Cardiovascular Health, 1998–1999
- Member of a research team on a large NIH grant investigating the relationship between exercise and cardiovascular health. Advised on design and data collection issues and provided statistical analyses. Developed and managed the data entry system.

HIV in Women: Stress, Immunity and Disease Progression, 1997–1998
- Member of a research team on a large NIH grant investigating the effects of stress on the progression of HIV in women. Advised on data collection and implemented the data entry system.

INVITED PRESENTATIONS

"On Confidence Intervals from Permutation Tests"
- *Seminar Celebrating Bill Schucany's 40 Years in Statistical Science at Southern Methodist University*, Southern Methodist University, September 17, 2010

"A Pseudo-Exact Sign Test for Cluster Correlated Data"
- *Nonparametric Statistics Research Conference*, Florida State University, January 18, 2003

"If Fisher had a Workstation: Scatterplots for Unordered Pairs"
- *Fourth Biennial International Conference on Statistics, Probability and Related Areas*, Northern Illinois University, DeKalb, Illinois, June 15, 2002
- Central Indiana Chapter of the American Statistical Association, Indianapolis, Indiana, April 16, 2002

"Exact Bootstrap Moments of an L-estimator"
- *International Conference on Order Statistics and Extreme Values: Theory and Applications*, Mysore, India, December 20, 2000
- *31st Symposium on the Interface*, Schaumburg, Illinois, June 12, 1999
- *University of Florida Statistics Symposium on Selected Topics in Nonparametric Methods*, Gainesville, Florida, January 23, 1999

CONTRIBUTED PRESENTATIONS

"On Confidence Intervals from Permutation Tests"
- *International Conference on Teaching Statistics*, Flagstaff, Arizona, July 16, 2014

"The Two-Sample t-Test and Randomized Experiments"
- *Statistical Papers Night*, Advanced Placement Statistics Exam Reading, June 7, 2007
- *United States Conference on Teaching Statistics*, The Ohio State University, May 19, 2007

"Using Permutation Tests as a Basis for a Nonparametrics Course"
- *Joint Statistical Meetings*, San Francisco, California, August 6, 2003

"A Pseudo-Permutation Distribution of the Sign Test in Cluster Correlated Data"
- *Joint Statistical Meetings*, New York, New York, August 15, 2002

"Applications of the Exact Bootstrap"
- *Joint Statistical Meetings*, Atlanta, Georgia, August 8, 2001

"Exact Bootstrap Moments of an L-estimator"
- *Joint Statistical Meetings*, Baltimore, Maryland, August 9, 1999

"A New Permutation Test of Bivariate Interchangeability"
- *Joint Statistical Meetings*, Dallas, Texas, August 12, 1998

"If Fisher had a Workstations: Scatterplots for Unordered Pairs"
- *Conference of Texas Statisticians*, Stephen F. Austin State University, April 20, 1996

DEPARTMENTAL COLLOQUIA AND SEMINARS

- Southern Methodist University, Department of Statistical Science, September 29, 1995
- Southern Methodist University, Department of Statistical Science, January 19, 1996
- Harvard University, School of Public Health, Department of Biostatistics, January 17, 1997
- Iowa State University, Department of Statistics and Statistical Laboratory, February 3, 1997
- North Dakota State University, Department of Statistics, February 21, 1997
- Western Michigan University, Department of Mathematics and Statistics, March 11, 1997
- University of Wisconsin–Oshkosh, Department of Mathematics, March 13, 1997
- Florida International University, Department of Statistics, March 19, 1997
- University of Nevada–Las Vegas, Department of Mathematical Sciences, March 21, 1997
- University of North Carolina at Greensboro, Department of Mathematical Sciences, April 3, 1997
- University of Florida, Department of Statistics, April 29, 1997
- University of North Carolina at Charlotte, Department of Mathematics, January 15, 1999
- University of Southern Illinois, Department of Mathematics, February 2, 1999
- Utah State University, Department of Mathematics and Statistics, February 4, 1999
- Kansas State University, Department of Statistics, February 9, 1999
- University of Missouri–Columbia, Department of Statistics, February 11, 1999
- University of Florida, Department of Statistics, February 16, 1999
- Indiana University–Purdue University Indianapolis, Department of Mathematical Sciences, February 18, 1999
- Illinois Institute of Technology, Department of Applied Mathematics, February 25, 1999
- University of Missouri–Rolla, Department of Mathematics and Statistics, February 26, 1999
- University of Arkansas, Department of Mathematical Sciences, March 5, 1999
- University of Montana, Department of Mathematical Sciences, March 8, 1999
- University of Wisconsin–Eau Claire, Department of Mathematics, March 12, 1999
- Central Michigan University, Department of Mathematics, March 15, 1999
- Northern Illinois University, Division of Statistics, November 21, 2000
- University of Wisconsin–La Crosse, Department of Mathematics, February 1, 2002

- Indiana University–Purdue University Indianapolis, Department of Mathematical Sciences, February 6, 2002
- Indiana University–Purdue University Indianapolis, Department of Mathematical Sciences, October 10, 2002
- Saint Olaf College, Department of Mathematics, November 21, 2002
- Saint Olaf College, Department of Mathematics, November 22, 2002
- Indiana University–Purdue University Indianapolis, Department of Mathematical Sciences, January 23, 2003
- Macalester College, Department of Mathematics and Computer Science, November 18, 2004
- Winona State University, Department of Mathematics and Statistics, January 20, 2006
- Macalester College, Department of Mathematics and Computer Science, February 14, 2006
- Portland State University, Fariborz Maseeh Department of Mathematics and Statistics, May 7, 2010
- St. Cloud State University, Department of Mathematics and Statistics, April 24, 2013
- St. Cloud State University, Department of Mathematics and Statistics, November 19, 2014

HONORS AND AWARDS

R. L. Anderson Student Paper Award at the *Summer Research Conference on Statistics* of the Southern Regional Council on Statistics, 1996

John E. Walsh Award for the highest performance on the Ph.D. written exam, Department of Statistical Science, Southern Methodist University, 1995

Paul D. Minton Award for the most outstanding first year graduate student, Department of Statistical Science, Southern Methodist University, 1993

Dedman College Dean's Award for outstanding incoming graduate student, Southern Methodist University, 1992

National Science Foundation ***Graduate Research Fellowship Program***, Honorable Mention, 1992

Ernest Stennes Award, Department of Mathematics and Statistics, St. Cloud State University, 1992

Pi Mu Epsilon National Mathematics Honor Society, 1992

Phi Kappa Phi National Honor Society, 1991

Foundation Scholar, St. Cloud State University, 1988–1990

University of Minnesota Talented Youth Mathematics Program, 1984–1988