

EDUCATION

Ph.D. Statistics, Kansas State University, 2003

- Dissertation Topic: Variance Testing with Simplicial Data Depth

M.S. Statistics, Kansas State University, 1999

B.S. Chemistry Education, Kansas State University, 1991

RESEARCH INTERESTS

Design of experiments, nonparametric statistics, multivariate statistics, undergraduate and graduate statistics education, technology enhanced teaching

PROFESSIONAL EXPERIENCE

ASSISTANT PROFESSOR Department of Statistics
California Polytechnic State University, September 2003-present

- Teaching 3 courses per quarter
 - Introduction to Statistical Concepts and Methods
 - Statistics for the Life Sciences
 - Statistical Inference for Management I
 - Probability and Statistics for Engineers and Scientists
 - Statistical Analysis for Engineers and Scientists
- Use the web, java applets, and hands-on simulations extensively in class
- Use a class web site to manage courses
- Departmental Committee Assignments: Program Recruitment (present), Business Statistics Course Review (present), Program Review Alumni Survey (2003-2004),
- Reviewer for a NSF curriculum development project. Co-PI's: Beth Chance and Allan Rossman

GRADUATE TEACHING ASSISTANT Department of Statistics
Kansas State University, August 1997-August 2003

- Taught one semester introductory statistics courses to social science and biology majors
- Taught the second semester introductory business statistics course
- Developed comprehensive course packet for the second semester business statistics course
- Developed a course web site to manage all courses
- Coordinator for the department New GTA Orientation Program (1999)
- Student Coordinator for the KSU Applied Statistics in Agriculture Conference (2000-2003)
- Mentor for new instructors in the department

GRADUATE RESEARCH ASSISTANT Department of Statistics
Kansas State University, August 1997-August 2003

- Kansas Water Office, August 1999-August 2003; developed models to predict water consumption for Kansas water basins; developed models to assess water quality for the state of Kansas and Kansas water basins
- Hazardous Substance Research Committee, Kansas State University, August 1997-August 1999; wrote citizens brief detailing statistical methodology for distribution to communities across the country serviced by the HSRC

CONSULTING STATISTICIAN Milliken & Associates, Inc.

Manhattan, KS, January 2000 – present

- Analysis of data and written reports for pharmaceutical and other clients in government and industry

STATISTICS INTERN Motorola Semiconductor Products Sector

Austin, TX, Summer 2000, Summer 2001

- Developed Logistic and Poisson regression analysis scripts in SAS to identify electrical parameters significantly affecting die yield
- Taught Yield Analysis Scripts Training Classes to device engineers in MOS 13
- Developed method for posting results of manually run SAS analysis scripts to the Yield Enhancement automated web crawler

MATH TEACHER/COACH Del Valle High School

Del Valle, TX, August 1993-August 1997

- Taught AP Calculus, Precalculus, Geometry, Algebra II, Algebra I
- Head Track and Cross Country Coach
- Assistant Basketball Coach

GRADUATE TEACHING ASSISTANT Department of Mathematics

Kansas State University, August 1991-August 1993

- Taught Calculus and College Algebra recitation classes

PUBLICATIONS

McGaughey, K. J. and Milliken, G. A. (2003). Variance testing with simplicial data depth. *Proceedings of the KSU Conference on Applied Statistics in Agriculture*.

PRESENTATIONS

McGaughey, K. J. and Milliken, G. A. (2003), "A Two-Sample Test for Unequal Variances Using Simplicial Data Depth," Contributed paper at the 2003 DIMACS Workshop on Data Depth, May 14, 2003; New Brunswick, NJ.

McGaughey, K. J. and Milliken, G. A. (2003), "A Two-Sample Test for Unequal Variances Using Simplicial Data Depth," Contributed paper at the KSU Conference on Applied Statistics in Agriculture, April 28, 2003; Manhattan, KS.

McGaughey, K. J. and Milliken, G. A. (2003). "Variance Testing with Simplicial Data Depth," Departmental Seminar, Department of Statistics, Kansas State University, January 23, 2003; Manhattan, KS.

McGaughey, K. J. (2000). "A Summer Internship at Motorola," Departmental Seminar, Department of Statistics, Kansas State University, October 12, 2000; Manhattan, KS.

HONORS

- Travel Grant Award, Pathways to the Future Workshop, Joint Statistical Meetings, Toronto, Ontario, Canada; August 2004
- Travel Grant Award, DIMACS Workshop on Data Depth, Rutgers University, New Brunswick, NJ; May 2003.
- Travel Grant Award, Conference on Designs for Generalized Linear Models, National Institute of Standards and Technology, Gaithersburg, MD; April 2002.
- ASA Membership Award, Department of Statistics, Kansas State University, Manhattan, KS; 1999-2002.
- On the Spot Award, Motorola Semiconductor Products Sector, Austin, TX; August 2000.

PROFESSIONAL SERVICE

- Statistics Education Section Program Chair, 2005 ASA Joint Meetings
- Statistics Education Section Roundtable Luncheon Chair, 2004 ASA Joint Meetings
- Advanced Placement Statistics Exam Reader, 2004
- Advanced Placement Statistics Comparability Study Participant, ETS 2003-2004

COMPUTER EXPERIENCE

- Statistical: SAS, Minitab, and S-Plus
- Operating System: Windows and Unix
- Presentation: PowerPoint
- Spreadsheet: Excel
- Word Processing: Corel Word Perfect and Microsoft Word

PROFESSIONAL MEMBERSHIPS

- American Statistical Association
- Mathematical Association of America