

CURRICULUM VITAE

PERSONAL INFORMATION:

NAME: Ananda Amarasekara Jayawardhana
TITLE: Associate Professor of Mathematics
PHONE: (620) 235-4414 (office) and (620) 231-9290 (home)
ADDRESS: Department of Mathematics, Pittsburg State University, Pittsburg, KS 66762
E-MAIL: ananda@pittstate.edu

ACADEMIC TRAINING:

1998 Ph.D. (Statistics) University of Missouri-Rolla
1993 MA. (Statistics) University of Missouri-Columbia
1982 B.Sc. (Mathematics) University of Peradeniya, Sri Lanka
1980 B.Sc. (General Science) University of Peradeniya, Sri Lanka

CURRENT OFFICES HELD:

- President Elect of the Faculty Senate of Pittsburg State University 2008-2009
- Secretary/Treasurer of the Council of Chapters Governing Board of the American Statistical Association, 2006-
- President: Kansas-Western Missouri Chapter of the American Statistical Association, 2008- 2009
- Member: Kansas Board of Regents Tilford Conference on Diversity and Multiculturalism, Planning Committee 2007-
- Member: Faculty Senate of the Pittsburg State University, 2005-2009
- Member: Academic Affairs Committee 2006-2010
- Faculty Advisor: PSU Actuarial Society, August 2000- present
- Casualty Actuarial Society Academic Liaison for PSU, 2006-

PAST OFFICES HELD:

- Founder Chair: Pittsburg State University Tilford Group 2007-2008
- Second Vice President PSU/KNEA 2006-2007
- Member: Budget Committee 2006-2008
- Member: Learning Resources Subcommittee 2005-2007
- Member: International Council of the Pittsburg State University, 2004-2007
- Member: Athletic Council of the Pittsburg State University, 2005-2007
- Vice President: Kansas-Western Missouri Chapter of the American Statistical Association, 2007- 2008

- Secretary/Treasurer: Kansas-Western Missouri Chapter of the American Statistical Association, 2004- 2007
- President Elect and President of the MOKAN: Local Affiliate of the National Council of Teachers of Mathematics, 2004-2005 and 2005-2006 respectively
- Member: Enrollment Management Committee of the Pittsburg State University, 2004-2006
- Member: Faculty Senate Executive Committee 2006-2007
- Member: Faculty Affairs Committee 2005-2006 and chair 2006-2007
- Member: Pittsburg State University BSED Committee, 2004-2007
- Member: Chair Search Committee 2004
- Member: Excellence in Teaching Award Committee 2005-06, 2006-07, 2007-08

RECOGNITION FOR TEACHING:

- College of Arts and Science Excellence in Teaching Award 2005
- Who's Who Among America's Teachers 2005

MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS:

- American Statistical Association
- Kappa Mu Epsilon Mathematics Honor Society

INOVATIVE CONTRIBUTIONS TO THE GROWTH OF THE MATHEMATICS DEPARTMENT:

- Started the actuarial science program
- Developed and taught for the first time the Theory of Interest course
- Developed and taught for the first time the Actuarial Mathematics course
- Developed and taught for the first time a course on Loss Models
- Started helping students find summer internships in insurance companies by taking them to job fairs
- Mentored seven students currently working as actuaries in industry
- Currently mentoring majority of the mathematics majors who have an emphasis in actuarial science
- Started a statistics poster competition

RESEARCH INTERESTS:

- Reliability and accelerated life testing
- Actuarial science education
- Biostatistics
- Statistics education

PUBLICATIONS:

- A. A. Jayawardhana (2008), "Writing Assignments in Elementary Statistics Classes," American Statistical Association 2007 Proceedings of the Section on Statistical Education, pp 2260-2263.
- Brooker, N., Lord, J.R., Long, J, & Jayawardhana, A.A., "AFLP Analysis of Genetic Diversity in Charcoal Rot Fungal Populations Impacted by Crop Rotations," Comm. Appl. Biol. Sci., Ghent University, 2008...
- A.A. Jayawardhana and C. Woodburn (2006), "Writing to Learn in Elementary Statistics," American Statistical Association 2005 Proceedings of the Section on Statistical Education, pp 2253-2257.
- A. Pinter and A.A. Jayawardhana (2006), "A Simulation Study to Test the Accuracy of Using Maximum Likelihood Predictive Density in Quality Control Assuming the Power Rule Model and the Exponential Distribution," American Statistical Association 2005, Proceedings of the JSM conference, Section on Quality and Productivity, pp 1848-1853.
- Chambers, D.K., Arruda, J. A., and Jayawardhana, A. A. (2005), "A synoptic water quality survey of the Spring River and its tributaries," Transactions of the Kansas Academy of Science, Vol. 108, No. 1/2, pp 47-56.
- Jayawardhana, A.A. and Samaranyake, V.A (2004), "Obtaining Prediction Bounds for a Weibull Life Distribution using Multi-Level Accelerated Life Tests: Corrigenda and Addenda," Journal of Statistical Computation and Simulations, Vol.74 No. 12, December 2004, pp 915-920
- Jayawardhana, A.A. and Samaranyake, V.A (2004), "Prediction Intervals for the Weibull Distribution, Inter Stat, November 2004.
- A.A. Jayawardhana and V.A. Samaranyake(2004), "Exponential Prediction Bounds in Accelerated Life Testing with Multiple Stress Factors," American Statistical Association 2003, Proceedings of the JSM conference, Section on Quality and Productivity, pp 2004-2011.
- Jayawardhana, A.A. and Samaranyake, V.A (2003), "Prediction Bounds in Accelerated Life Testing: Weibull Models with the Inverse Power Relationship," Journal of Quality Technology, Vol 35, No. 1, January 2003, pp 89-103.
- A.A. Jayawardhana and V.A. Samaranyake(2002), "Obtaining Prediction Bounds for a Weibull Life Distributions Using Multi-Level Accelerated Life Tests," American Statistical Association 2002, Proceedings of the JSM conference, Section on Physical and Engineering Sciences, pp 1632-1638.
- A.A. Jayawardhana and V.A. Samaranyake(1998), "Predictive Density Estimation in Accelerated Life Testing," American Statistical Association 1998 Proceedings of the Section on Quality and Productivity, 1998, pp 26-31.
- A.A. Jayawardhana (1998), "Predictive Density Estimation in Life Testing," [Ph.D. Dissertation](#), University of Missouri-Rolla, Rolla, MO

- Richard R. Bryant, Ananda Jayawardhana, V. A. Samaranayake, and Allen Wilhite "The Impact of Alcohol and Drug Use on Employment: A Labor Market Study Using the National Longitudinal Survey of Youth," University of Wisconsin-Madison, Institute for Research on Poverty Discussion Paper- [1996 DP 1092-96](#)

PAPERS PRESENTED AT MAJOR CONFERENCES:

- 08/2008-- A.A. Jayawardhana "Weibull Prediction Bounds in Accelerated Life Testing with Two Stress Factors," JSM, Denver, Colorado
- 08/2007-- A.A. Jayawardhana, "Writing Assignments in Elementary Statistics," JSM, Salt Lake City, Utah
- 08/2005-- A.A. Jayawardhana and C. Woodburn, "Writing to Learn in Elementary Statistics," JSM, Manneapolis, MN
- 08/2005-- Adam Pintar and A.A. Jayawardhana, "A Simulation Study to Test the Accuracy of Using Maximum Likelihood Predictive Density in Quality Control Assuming the Power Rule Model and the Exponential Distribution," JSM, Minneapolis, MN.
- 08/2003-- A.A. Jayawardhana and V.A. Samaranayake, "Exponential Prediction Bounds in Accelerated Life Testing with Multiple Stress Factors," JSM, San Francisco, CA
- 08/2002-- A.A. Jayawardhana and V.A. Samaranayake, "Obtaining Prediction Bounds for a Weibull Life Distribution using Multi-level Accelerated Life Tests," JSM, New York, NY
- 06/1999-- A.A. Jayawardhana and V.A.Samaranayake, "Predictive Density Estimation in Accelerated Life Testing for Lognormal Life Distributions," THE 6TH ASA/IMS SPRING RESEARCH CONFERENCE ON STATISTICS IN INDUSTRY AND TECHNOLOGY 1999, Minneapolis, MN
- 08/1998-- A.A. Jayawardhana and V.A. Samaranayake, "Predictive Density Estimation in Accelerated Life Testing," ASA Q&P Section, JSM, Dallas, TX
- 08/1996-- A.A. Jayawardhana and V.A. Samaranayake, "Prediction Interval for the Weibull Random Variables," JSM, Chicago, IL

GRADUATE STUDENTS (MS in Mathematics):

Ningning Wang (2007), Paper Title: Accelerated test Models and Prediction Bounds in Accelerated Life for the Weibull Models and Three Levels of Acceleration

Sun Wook Kim (2007), Paper Title: Use of maximum Likelihood Predictive Density in Accelerated Life Testing Assuming a Weibull Distribution

Olga Vsevolozhskaya (2006), Paper Title: Credibility Theory: A Bayesian Approach

Loren Karleskint (2006), Paper Title: Credibility Theory

Adam Pintar (2004), Paper Title: Accelerated Life Testing Assuming Exponential Distribution

Desmond Andrews (2003), Paper Title: Parameter Estimation of a Multivariate Exponential Distribution: A Study of the Marshal-Olkin Common Shock Model

Neal Myron Smith (2003), Paper Title: Life Tables in Survival Analysis

Hung-Chih Ku (2002), Paper Title: Nearest Neighbor Analysis-Papadakis Method

Yi-Ling Lin (2001), Paper Title: Nonparametric Statistical Tests for Location

GRADUATE THESES COMMITTEES (MS):

Mathew Fry (Biology)

Tyler Cline (Biology)

Chris Eichman (Biology)

Ryan Lord (2006), MS in Biology

Kate Walker (2006), MS in Biology

Carla Fairbanks (2004), MS in Biology

Josh Collins (2003), MS in Biology

Angie J. Stefanoni (2002), MS in Biology

Lance E. Lagerstrom (2001), MS in Nurse Anesthesia, KUMC

Karen L. Sapp (2001), MS in Nurse Anesthesia, KUMC

Scott C. Gadberry (2000), MS in Nurse Anesthesia, KUMC

Kirk E. Lott (2000), MS in Nurse Anesthesia, KUMC

EMPLOYMENT HISTORY:

August 2007
-December 2007 **Visiting Associate Professor**, University of Missouri Rolla (on sabbatical leave)

August 2004
- Present **Associate Professor**, *Department of Mathematics, Pittsburg State University Pittsburg, Kansas.*
Duties: Teaching undergraduate and graduate courses in statistics, service on campus and in professional organizations, and statistical consulting.

- August 1999
- 2004
Assistant Professor, *Department of Mathematics, Pittsburg State University Pittsburg, Kansas.*
Duties: Teaching undergraduate and graduate courses in statistics, service on campus and in professional organizations, and statistical consulting.
- January 1999
- August 1999
Lecturer, *Department of Mathematics, Pittsburg State University Pittsburg, Kansas.*
Duties: Teaching undergraduate and graduate courses in statistics.
- January 1994
- December 1998
Graduate Teaching Assistant, *Department of Mathematics and Statistics, University of Missouri-Rolla, Rolla, Missouri.*
Duties: Teaching undergraduate courses.
- Summer 1996
Summer Intern, *Bell Communications Research, Morristown, New Jersey.*
Duties: C++ programming and research on generalized p-values.
- Summer 1995
Research Assistant, *Department of Mathematics and Statistics, University of Missouri-Rolla, Rolla, Missouri.*
Duties: SAS programming for econometric analysis.
- August 1991
- December 1993
Graduate Teaching Assistant, *University of Missouri-Columbia, Columbia, Missouri.*
Duties: Teaching undergraduate courses.
- January 1991
- August 1991
Research Assistant, *School of Nursing, University of Missouri-Columbia, Columbia, Missouri.*
Duties: SAS programming and helping faculty and graduate students to analyze data.
- Summer 1991
Research Assistant, *Ellis-Fischel Cancer Hospital, Columbia, Missouri.*
Duties: SAS programming and helping to analyze data.
- January 1983
-December 1989
Assistant Librarian, *Faculty of Medicine, Faculty of Veterinary Sciences and School of Dentistry, University of Peradeniya, Sri Lanka.*
Duties: Administration of the system of libraries.
- January 1983
- December 1989
Part Time Instructor, *Sarananda University College, Peradeniya, Sri Lanka.*
Duties: Teaching undergraduate mathematics and statistics.
- August 1980
- December 1982
Assistant Lecturer, *Department of Mathematics, Faculty of Science, University of Peradeniya, Sri Lanka.*
Duties: Teaching undergraduate mathematics courses.

COURSES TAUGHT:

Loss Distributions, Credibility Theory, Actuarial Mathematics, Design of Experiments, Regression, Time Series Analysis, Nonparametric Statistics, Probability Models,

Mathematical Statistics, Theory of Interest, Statistics for Social Sciences, Engineering Statistics, Elementary Statistics, Introduction to Probability and Statistics, Elementary Probability and Statistics, Probability and Statistics, Algebra, Trigonometry, Calculus I, Calculus II, Calculus III, Geometry, Advanced Calculus, Elementary Differential Equations, Set Theory, Basic Mathematics for Social Sciences, Fluid Mechanics, and Freshman Experience

COMMUNITY SERVICE:

- Member of the Pittsburg Sunrise Rotary Club
- Occasional driver for the Meals on Wheels Program 2004-present
- Regular driver for the Meals on Wheels Program 2000-2003
- Salvation Army bell ringer, December 2004, 2005, 2006

PAST SERVICES:

- Faculty advisor, International Student Association at PSU
- AP Statistics Grader 2005
- PSU/KNEA representative for the 2005 NEA Convention

COMPUTER PROFICIENCY:

- Languages - FORTRAN, C++, APL, Visual Basic
- Operating Systems - CMS, UNIX, DOS, WINDOWS.
- Statistical and Mathematical Software - SAS, SYSTAT, MINITAB, IMSL
- Extensive experience in SAS programming.