CURRICULUM VITAE

PERSONAL INFORMATION:

NAME**:** Ananda Amarasekara Jayawardhana

TITLE: Associate Professor of Mathematics

PHONE: (620) 235-4414 (office), (620) 231-9290 (home), and (620)-704-0451 (cell)

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

RECOGNITION FOR TEACHING:

- College of Arts and Science Excellence in Teaching Award 2005
- Who's Who Among America's Teachers 2005
- Yearly Performance Appraisal: Received Exceptional rank during the last 10 years except for the year 2007 when Dr. Jayawardhana did not apply for the Exceptional rank due to the sabbatical leave for half the year. Rank of Meritorious was awarded for 2007.

CURRENT OFFICES HELD:

- Secretary/Treasurer of the Council of Chapters Governing Board of the American Statistical Association, 2006- present
- Chapter Rep. Kansas-Western Missouri Chapter of the American Statistical Association, 2009- 2012
- Member: Kansas Board of Regents Tilford Conference on Diversity and Multiculturalism, Planning Committee 2006- present
- Faculty Advisor: PSU Actuarial Society, August 2000- present
- Casualty Actuarial Society Academic Liaison for PSU, 2006- present
- Member of the PSU Enrollment Management Council
- Member of the Faculty Senate Executive Committee, Budget Committee, and Student Faculty Committee 2010-2011

PAST OFFICES HELD:

- President of the Faculty Senate of Pittsburg State University 2009-2010 and a member of numerous committees representing the Faculty Senate
- Secretary of the Council of Faculty Senate Presidents of the Kansas Board of Regent Universities 2009-2010
- Co-Organizer and Co-Chair: Symposium on Innovations in Design, Analysis, and Dissemination: Frontiers in Biostatistics held on April 2-3, 2009
- Member of the Pittsburg State University Presidential Search Committee 2008-2009
- Member Legislative Post Audit Task Force 2009
- Member of the Program Evaluation Committee, College of Arts and Science 2008-2009
- Member: Pittsburg State University Service Recognition Award Committee, 2008-2010
- Founder Chair: Pittsburg State University Tilford Group on Diversity 2007-2008
- Second Vice President PSU/KNEA 2006-2007
- Member: Academic Affairs Committee 2006-2007
- Member: Budget Committee 2006-2008
- Member: Learning Resources Subcommittee 2005-2007
- Member: Faculty Senate Executive Committee 2006-2007 and 2008-2009
- Member: Faculty Affairs Committee 2005-2009, chair 2006-2007
- Member: International Council of the Pittsburg State University, 2004-2007, 2008-2009
- Member: Athletic Council of the Pittsburg State University, 2005-2007
- Member: Faculty Senate of the Pittsburg State University, 2005-2009
- President 2008-2009, Vice President 2007-2008, and Secretary/Treasurer 2004-2007: Kansas-Western Missouri Chapter of the American Statistical Association
- 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: Pittsburg State University Bachelor of Science in Mathematics Education Committee, 2004-2007
- Member: Chair Search Committee 2004
- Member: Excellence in Teaching Award Committee 2005-06, 2006-07, 2007-08, 2008-09
- Session Chair on one of the sessions on Statistical Education, JSM 2008, Denver, CO
- American Statistical Association Travelling Course Committee 2008-present

INOVATIVE CONTRIBUTIONS TO THE GROWTH OF THE MATHEMATICS DEPARTMENT:

- Started the actuarial science program and taught several new courses like Time Series Analysis, Survival Analysis, Theory of Interest, Actuarial Mathematics, Loss Distributions, and Credibility theory. Some of the courses are legislated now.
- Started helping students find summer internships in insurance companies by taking them to job fairs and taking them to shadow actuaries for a day.
- Encouraged and helped students apply for minority scholarships and other scholarships and our students have been successful

- Started an Actuarial Achievement Award with the funds from the Allstate Insurance Company
- Started a statistics poster competition for Missouri and Kansas in the local area of southeast Kansas and southwest Missouri
- Gave life to an almost dead statistics emphasis in the department and several of my former students are PhD candidates at different schools now.

MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS:

- American Statistical Association
- Kappa Mu Epsilon Mathematics Honor Society

RESEARCH INTERESTS:

- Reliability and accelerated life testing
- Statistics education

PUBLICATIONS:

- Jayawardhana, A. A. (2009), “Weibull Prediction Bounds in Accelerated Life Testing with Two Stress Factors of Acceleration, American Statistical Association 2008 Proceedings of the Section on Physical and Engineering Sciences, pp 2888-2894
- Brooker, N., Lord, J. R., Long, J, & Jayawardhana, A. A. (2008), “AFLP Analysis of Genetic Diversity in Charcoal Rot Fungal Populations Impacted by Crop Rotations,” Comm. Appl. Biol. Sci., Ghent University, 2008…
- Jayawardhana, A. A. (2008), “Writing Assignments in Elementary Statistics Classes,” American Statistical Association 2007 Proceedings of the Section on Statistical Education, pp 2260-2263.
- Jayawardhana, A. A. and Woodburn, C. (2006), "Writing to Learn in Elementary Statistics," American Statistical Association 2005 Proceedings of the Section on Statistical Education, pp 2253-2257.
- Pintar, A. and Jayawardhana, A. A. (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 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 Samaranayake, 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 Samaranayake, V. A. (2004), "Prediction Intervals for the Weibull Distribution, Inter Stat, November 2004.
- Jayawardhana, A. A. and Samaranayake, V. A. (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 Samaranayake, 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.
- Jayawardhana, A. A. and Samaranayake, V. A. (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.
- Jayawardhana, A. A. and Samaranayake, V. A. (1998), "Predictive Density Estimation in Accelerated Life Testing," American Statistical Association 1998 Proceedings of the Section on Quality and Productivity, 1998, pp 26-31.
- Jayawardhana, A. A. (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:

- 08/2010—A.A. Jayawardhana “Writing to Learn in Upper Level Statistics Courses,” JSM, Vancouver, BC
- 08/2009—A.A. Jayawardhana and V.A. Samaranayake “Lower Tolerance Bounds in Accelerated Life Testing: Weibull Model with Inverse Power Relationship,” JSM, Washington, DC
- 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, Minneapolis, 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

GRANTS:

- "Chemical Modification and Evaluation of Modified Plant Compounds for Seed Treatment Protection Against Soil Borne Diseases of Soybeans." The grant was in the amount of $35,000 for 2006-2007. Principal investigator: Dr. Nancy Brooker, Department of Biology, PSU.
- "Chemical Modification and Evaluation of Modified Plant Compounds for Seed Treatment Protection Against Soil Borne Diseases of Soybeans". The grant was in the amount of $35,700 for 2007-2008. Principal investigator: Dr. Nancy Brooker, Department of Biology, PSU.
- "Field Testing Coumarin Derivatives As Seed Protectants Against Soil-Borne Diseases". The grant was in the amount of $37,000 for 2008-2009. Principle investigator Dr. Ananda Jayawardhana.

GRADUATE STUDENTS (MS in Mathematics):

Brad Smith (2010) Statistical Power of a Test (Currently PhD student at University of Nebraska)

Karalyn Lenox (2010) Lesson Plans for Introducing SAS to New Students/Programmers

Dusty Peterson (2009), Paper Title: Derivatives and Option Pricing Using the Binomial Model and the Monte Carlo Simulation (Currently an Actuarial Assistant)

Ningning Wang (2007), Paper Title: Accelerated Test Models and Prediction Bounds in Accelerated Life for the Weibull Models and Three Levels of Acceleration (Currently at the PhD program in statistics at Rutgers)

Sun Wook Kim (2007), Paper Title: Use of Maximum Likelihood Predictive Density in Accelerated Life Testing Assuming a Weibull Distribution (Currently at the PhD program in statistics at University of Missouri-Columbia)

Olga Vsevolozhskaya (2006), Paper Title: Credibility Theory: A Bayesian Approach (Currently at the PhD program in statistics at University of Montana)

Loren Karleskint (2006), Paper Title: Credibility Theory (Currently a practicing Actuary)

Adam Pintar (2004), Paper Title: Accelerated Life Testing Assuming Exponential Distribution (Completed PhD in statistics at Iowa State University, 2010)

Desmond Andrews (2003), Paper Title: Parameter Estimation of a Multivariate Exponential Distribution: A Study of the Marshal-Olkin Common Shock Model (Currently a practicing Actuary, FCAS 2010)

Neal Myron Smith (2003), Paper Title: Life Tables in Survival Analysis (Currently a high school teacher)

Hung-Chih Ku (2002), Paper Title: Nearest Neighbor Analysis-Papadakis Method (Currently at the PhD program in statistics at Oklahoma State University)

Yi-Ling Lin (2001), Paper Title: Nonparametric Statistical Tests for Location (Currently a lecturer at a University in Taiwan)

CURRENT GRADUATE THESES COMMITTEES (MS):

Taewon Kim (Mathematics- Graduation December 2010)

Eric Row (Biology)

PAST GRADUATE THESES COMMITTEES (MS):

Anastasia Beezley (2010), Nursing

Muhammad Akram (2010), Chemistry

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 **Tenure Track 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 and reading rooms. Reported to the Dean of the Library (Librarian) and the Dean of the Faculty of Medicine. Helped the early efforts to establish separate libraries for the Faculty of Veterinary Sciences and School of Dentistry.

January 1983 - December 1989 **Part Time Instructor**, *Sarananda University College, Peradeniya, Sri Lanka.*
Duties: Teaching undergraduate mathematics and statistics and chairing the mathematical sciences department.

August 1980 - December 1982 **Assistant Lecturer**, *Department of Mathematics, Faculty of Science, University of Peradeniya, Sri Lanka.*
Duties: Teaching undergraduate mathematics courses.

GRADUATE LEVEL COURSES TAUGHT:

Regression Analysis, Time Series Analysis, Nonparametric Statistics Based on Ranks, Probability Models, Mathematical Statistics, Survival Analysis, Design of Experiments, Loss Distributions, Credibility Theory, and Actuarial Mathematics

UNDERGRADUATE LEVEL COURSES TAUGHT:

Probability and Statistics, 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, Trigonometry, Advanced Calculus, Real Analysis, Elementary Differential Equations, Set Theory, Basic Mathematics for Social Sciences, Fluid Mechanics, Theory of Interest, and Freshman Experience

COMMUNITY SERVICE:

- Participate in most of the service activities as a member of the Pittsburg Sunrise Rotary Club
- Occasional driver for the Meals on Wheels Program 2004-present

PAST COMMUNITY SERVICE:

- Singlehandedly collected $6,300 after the Boxing Day Tsunami to build a school in Sri Lanka
- Gave co-leadership to conduct several short courses in statistics for Kansas City area statisticians during 2004-2009.
- Faculty advisor, International Student Association at PSU 2000-01
- AP Statistics Grader 2005
- PSU/KNEA representative for the 2005 National Educators Association Convention
- Regular driver for the Meals on Wheels Program 2000-2003
- Salvation Army bell ringer, December 2004, 2005, 2006

COMPUTER PROFICIENCY:

- Languages - FORTRAN, C++, Visual Basic
- Statistical and Mathematical Software - SAS, MINITAB, IMSL
- Extensive experience in SAS programming

INTERNATIONAL EXPOSURE

- World Health Organization sponsored trip to Tokyo University in Japan for a training in library and information science in 1987
- World Health Organization sponsored trip to Jakarta, Indonesia to participate in establishing a national library in 1987
- World Health Organization sponsored trip to Bangkok, Thailand to participate in the moving of Mahidol University Medical Library from the inner city to suburbs in 1987