

Curriculum Vita

Jack D. Tubbs

Professor of Statistics
Department of Statistical Science
Waco, Texas 76798

(O) 254-710-1699
(F) 254-710-4477

email: jack_tubbs@baylor.edu

Education Background

Ph.D. Mathematics, Texas Tech University, 1974.

M.S. Mathematics, Texas Tech University, 1972.

B.S. Mathematics, Eastern New Mexico Univ., 1970.

Professional Experience

2004-present Professor and Chair Department of Statistical Science, Baylor University.

2003-present Director of Statistical Consulting Center at Baylor University.

2003-2004 Professor of Statistics and Director of the Institute of Statistics, Baylor University.

2001-2002 Chairman of the Division of Statistics and Director of the Center for Statistical Consulting, University of Arkansas.

1996 Visiting Professor of Statistics, Rice University, Houston, TX

1990-present Professor of Mathematical Sciences, University of Arkansas.

1982-1990 Associate Professor of Mathematical Science, University of Arkansas

1976-1981 Assistant Professor of Mathematical Sciences, University of Arkansas

1974-1976 National Research Council post-doctoral, JSC/NASA, Houston, TX

Teaching Experience

Courses Taught:

Undergraduate: Nonparametric methods, Mathematical Statistics and Probability, Sampling Theory, Biostatistics, Introduction to Statistical Concepts, Prob and Stat for Engineers, and Experimental Design

Graduate: Time Series, Multivariate Analysis, Statistical Methods, Linear Models, Experimental Design, Stochastic Processes, Regression Theory, Robust Estimation and Regression, Statistics Using Splus, Statistical Inference and Probability

Computer Experience: mainframe, PCs and Macs. Webpage development with HTML, Statistical Software/Packages: Unix, *LaTeX*, Splus, R, SAS, DataDesk, Matlab, Maple, SyStat, StatView, Stata and SAS/JMP.

Dissertation/Thesis Direction:*(partial listing)*

Lin Zhang, Semiparametric AUC Regression for Testing Treatment Effect in Clinical Trial

Chun Jin Lee, Goodness of Fit for Extreme Value data

Gloria Cappy, ARMA Modeling

Stephen Lewis, Data Transformation for ARMA models

Michael Meredith, Multivariate Goodness of Fit

Achamyelah Gebremariam, Ranking Models with Hamming Distances

Jan Hollenberg, CART Regression Trees with VA Data

Consulting:*(partial listing)*

Scott and White Hospital, Temple, Texas

Applied Intelligence Systems, Inc. Ann Arbor, MI (Quality assurance in machine vision)

ERIM, Ann Arbor, Michigan (Classified target recognition algorithms)

SOV, Inc. Ann Arbor, MI (Image understanding and SPC)

Wal-Mart Inc., Bentonville, Arkansas (Quality assurance - insurance forms)

Proctor and Gamble, case study with T. Filloon.

Expert in several legal cases, Houston, TX. and Little Rock, AR.

Professional Service:*(partial listing)*

Referee; Communications in Statistics, IEEE PAMI, IEEE SMC, Pattern Recognition

Book reviewer for Addison Wesley and Duxbury.

University representative to Southern Regional Committee on Statistics (SRCOS) since 1982.

SRCOS Treasurer 1995-2002.

SRCOS President Elect 2002-2004.

SRCOS President 2004-2006.

SRCOS Past President 2006-2008.

Chairman local arrangements for SRCOS SRC Conference, Table Rock Resort June 1986.

Chairman local arrangements for SRCOS SRC Conference, Table Rock Resort June 1988.

Chairman local arrangements for SRCOS SRC Conference, DeGray State Park and Resort June 1996.

Chairman local arrangements for SRCOS SRC conference, Mountain View Arkansas, June 1999.

Chairman program and local arrangements for SRCOS SRC conference, Kerrville, Texas, June 2006.

University Service:(partial listing)

Department Steering, Graduate, and Undergraduate Committee

Chair of Search Committees for Chairperson of Mathematical Sciences.

Faculty Research Committee, Fulbright College

Committee on Computer Resources, Fulbright College

Academic Programs Committee, Fulbright College

Faculty personnel committee for Department of CS

Graduate Council

Responsible for writing several NSF equipment proposals for Undergraduate computer laboratories.

Chair, Committee for writing NSF proposal for the VIGRE Program.

Reader, AP STAT exam 2000-2006.

Table Leader, AP STAT exam 2007-2008.

Chair Search Committee for VP Student Life, Baylor University 2005.

Professional Membership:

Institute of Mathematical Statistics

American Statistical Association

Publications

Refereed Journals

The distribution of a symmetric statistic from mixed population. Texas J. of Science, 26, 1975, pp. 1-11, with T. O. Lewis.

A note on the analysis of the MANOVA model and its applications to growth curves. Commun. in Statist., 4, 1975, pp. 643-650, with T. O. Lewis and B. S. Duran.

An empirical sensitivity study of mixture proportion estimators. Commun. in Statist., B5, 1976, pp. 115-120, with W. A. Coberly.

Pattern recognition of landsat data based upon Temporal trend analysis. J. of Remote Sensing, 6, 1977, pp. 303-310, with J. L. Engvall and Q. A. Holmes.

The influence of false color infrared displays on Training field identification. J. of Remote Sensing, 8, 1979, pp. 225-235, with W. A. Coberly and P. L. Odell.

Varstab: a procedure for determining homoscedastic Transformations of multivariate normal populations, Commun. in Statist., B6, 1980, pp. 589-598, with J. Dunn.

Effect of autocorrelated observations on Confidence sets based upon chi-square distribution. IEEE Trans. on Man, Sys., and Cybern., 10, 1980, pp. 177-180.

Effect of autocorrelated training samples in Bayes probability of misclassification. *Pattern Recog.*, 12, 1980, pp. 351-354.

The effect of serial correlation on confidence Regions for the parameters of a multivariate normal population. *Commun. in Statist.*, A9, 1980, pp. 1341-1351.

Linear dimension reduction and Bayes Classification with unknown population parameters. *Pattern Recog.*, 15, 1983, pp. 167-172, with W. A. Coberly and D. Young.

A note on the theoretical justification of Landsat transformations. *Pattern Recog.*, 17, 1984, pp. 429-432.

A note on the ratio of positively Correlated gamma variates. *Commun. in Statist.*, A14, 1985, pp. 13-23.

Moments for a ratio of correlated gamma variates. *Commun. in Statist.*, A15, 1986, pp. 251-259.

A differential equations approach to the modal location for a bivariate gamma distribution. *J. of Mult. Analysis*, 21, 1987, pp. 53-66, with D. W. Brewer.

A note on parametric image enhancement. *Pattern Recognition*, 20, 1987, pp. 617-620.

A note on template matching in binary images. *Pattern Recognition*, 22, 1988, pp. 359-365.

Measures of confidence associated with combining classification results. 1994, *Systems, Man, and Cybernetics*. with W. O. Alltop.

Comparing Nonsteroidal Anit-inflammatory Drugs with Respect to Stomach Damage with T. Filloon, 1998 (a chapter in *Statistical Case Studies: A Collaboration Between Academe and Industry*, SIAM (ed. R. Peck, L. Haugh, and A. Goodman).

School Bus Acceleration Characteristics, Mack-Blackwell National Rural Transportation Study Center, 1998, with J. Gattis and S Nelson.

Vertisol Carbonate Properties in Relation to Mean Annual Precipitation: Implications for Paleoprecipitation Estimates, with Lee Nordt, Maria Orosz, Steven Driese. *The Journal of Geology*, 2006, volume 114, p. 501510, with L. Nordt , J. Von Fischer, L. Tieszen.

Late Quaternary grassland evolution in the North American Great Plains inferred from C4/C3 ratios of buried soil organic matter with Lee Nordt, Joseph Von Fischer, and Larry Tieszen, *Quaternary Science Reviews* 27 (2008) 16001611.

Inference for Semiparametric AUC Regression Models with Discrete Covariates, with Yan Zhao, Lin Zhang under review, *Statistics in Biopharmaceutical Research* (2010).

An Investigation of Elevated Body Mass Index in Pre-School Children in South and Central Texas with Piziak, V., Morgan-Cox, M. and Rajab, M. (2010).

Papers in Published Proceedings (*partial listing*)

Detection of clouds in landsat data. Fifth Annual Remote Sensing Conference, Tullahoma, TN, 1975.

Classification of landsat agricultural data based upon color trends. 11th International Symposium on Remote Rensing (ISRS), Ann Arbor, MI, 1977, pp. 919-23.

Spatial correlation and its effect upon classification results in landsat. 12th ISRS, Manila, Phillipines, 1978, pp. 775-80.

Classification results using spatially correlated Landsat data. 13th ISRS, Ann Arbor, MI, 1979, pp. 1499-1505.

Effect of correlated observations on confidence regions. 6th Conference on Prob. and Statist. in atmospheric Sciences, Banff, AL, Canada, 1979, pp. 244-47.

Classification of landsat multitemporal training data based upon growth curve analysis. 14th ISRS, San Jose, Costa Rica, 1980, pp.1123-27.

Feature selection and its impact upon Bayes' procedure. 14th ISRS, San Jose, Costa Rica, 1980, pp. 1467-75.

Automatic and semi-automatic classification of Landsat agricultural crops. 15th ISRS, Ann Arbor, MI, 1981, pp. 1065-74.

Binary template matching in machine vision. Conference on Applied Analysis in Aerospace, Industry, and Medical Sciences, University of Houston-Clear Lake, Houston, 1985.

Combining Classification Results for Use in Expert systems. Symposium on the Interface: Computing Science and Statistics. Orlando, FL, April, 1989.

Grants

1974-1976 National Research Council Fellowship, NASA/JSC

1977-1979 NASA/MSFC, NAS8-31550, Statistical Analysis of Multivariate Atmospheric Data

1979-1980 NASA/MSFC, NAS8-22334, Statistical Models for Space Shuttle Environmental Analysis

1980-1981 NASA/MSFC, NAS8-22334, renewal

1980-1983 NSF/EPSCOR, associate faculty member

1981-1983 NASA/MSFC, NAS8-34502, Statistical modeling of Space Shuttle Environmental

1989-1991 NAVY, Measures of Confidence

1996 NSF support for producing a Case Study in Statistics with T. Filloon

2006-2008 Lilly Foundation Grant for the acceleration of the training graduate students in statistical sciences. Our students and faculty interacted with scientists from the Eli Lilly Company on real problems using real data.

2006-2007 Waco Police Department where students transferred data from local data bases so that the data became part of a national data base.

Scott and White Hospital - practicum funding for graduate students

VA Hospital – Waco - practicum funding for graduate students

Baylor Medical Health Center - practicum funding for graduate students

Non Academic Experience:*(partial listing)*

Fall 1976 - Legal expert in a court case.

Summer 1980 - spent the summer at ERIM in Ann Arbor, MI. working on problems related to target cueing and recognition

Summer 1984 - spent the summer at AISI, Inc in Ann Arbor, MI. working on problems in machine vision systems. Responsible for qualitative algorithm testing for system delivered to IBM Owego, NY

Summer 1987 - spent the summer at NAVY Weapons Center China Lake, CA working on statistical problems in expert systems

Summer 1989 - spent the summer at NAVY Weapons Center China Lake, CA working on statistical problems in expert systems

1991-1993 working on a demonstration of a real time target Recognition system, ERIM Ann Arbor, Michigan.

1996 Legal expert/consultant in several civil cases.

1996-1998, Case Study with T. Filloon, Proctor and Gamble.

Awards

Paul Minton award for outstanding contribution to Statistical Service, 2008.