

PROGRAM

SEVENTH U.S. ARMY CONFERENCE ON APPLIED STATISTICS

October 24-26, 2001

Hosted by Los Alamos National Laboratory

Monday & Tuesday, October 22 & 23

TUTORIAL

Applied Logistic Regression

David Hosmer, University of Massachusetts

Wednesday, October 24

GENERAL SESSION I

On a New Approach to Robust Estimation

David W. Scott (Keynote)

Predicting and Understanding Complex Data

Leo Breiman

SPECIAL SESSION I

Case Studies in Elicitation and Quantification of Expertise and Judgment

Mary Meyer, Jerry Morzinski, Laura McNamara, and Gregory Wilson

SPECIAL SESSION II: URBAN WARFARE

Nuggetizing the Elephant: Managing Urban Complexity During Military Operations

Russell W. Glenn

Networked Organizational Structure and Function in a Complex Megacity

Matt Begert

Real-Time Pseudo-Randomly Generated Features for Combat Experimentation in Urban Sprawl

Greg Tackett

International Trends in MOUT Research

Danny C. Champion

CONTRIBUTED SESSION I

An Experimental Design to Collect Human Science Data for Modeling and Analysis

Eugene Dutoit, Michael Statkus, Arthur Garrett, and Luci Salvi

Analysis in the MOUT ACTD

W. M. Christenson

Human Factors Evaluation of the Digitized Battlefield (DCX Phase I)

Jock O. Grynovicki and Kragg P. Kysor

Contributed Session II

Advantages of NDE Data over Destructive Testing Data

C. Shane Reese and Mike Hamada

Statistical Artifacts in the Ratio of Discrete Quantities

Roger G. Johnston

Statistical Assessment of Aging Materials

Joanne Wendelberger

CONTRIBUTED SESSION III

Simulating Survival Probabilities of a Lander Mission on Mars

Karen Kafadar

Functional Sensitivity Analysis for Computer Model Output

Katherine Campbell

Introduction to Data Mining with Military Applications

Christopher Jeffreys and James Wisnowski

CLINICAL SESSION I

The Effects of Vegetation on Line-of-Sight (LOS) for Dismounted Infantry Operations

Danny C. Champion and Louis A. Fatale

On the Implementation of a Replication Paradigm for Calculating Confidence Intervals on Latin Hypercube Statistics

Vicente J. Romero

CONTRIBUTED SESSION IV

Bootstrapping a Stochastic Process: Time-Indexed Risk Profile Analysis of an Index Fund

James R. Thompson and Edward E. Williams

Analyzing Vulnerability Results for Tags and Tamper-Indicating Seals
Roger G. Johnston and Anthony R.E. Garcia

Liars, Damned Liars and Statisticians
Arthur Fries

1830 - 2115 WILKS AWARD BANQUET

1830 - 1900 SOCIAL
1900 - 2000 DINNER
2000 - 2045 BANQUET ADDRESS

Overview of Stockpile Stewardship
Jas. Mercer-Smith

Thursday & Friday, October 25 & 26

GENERAL SESSION II

Development of Some Locally Most Powerful Rank Tests for Correlation
W. J. Conover

Boosting with the L2 Loss: Regression and Classification
Bin Yu

CONTRIBUTED SESSION V

Subsampling of Biased Statistics with Application to Nonparametric Density and Intensity Estimation
Andreas Futschik

The Biggest, the Oldest, and Other Such Extremes
Bruce J. West

Reducing the Error in Estimating Production Costs of Multiple-Unit Procurements
Scott M. Vickers

Contributed Session VI

Cybernetic Ballistic Missile Defense Systems
Robert L. Fry

Sensitivity Analysis Using Design of Experiments in Ballistic Missile Defense
Jacqueline K. Telford

Model-Based Methods for Biological Agent Identification in Mass Spectrometry
Fernando Pineda

CONTRIBUTED SESSION VII

Identifying Storms in Noisy Radio Frequency Data via Satellite: An Application of Density Estimation and Cluster Analysis

Tom Burr, Angela Mielke, and Abram Jacobson

The Moment Preservation Method of Cluster Analysis

Bernard Harris

Rank Adapted Kernel Density Estimation

David B. Kim

CONTRIBUTED SESSION VIII

The Role of Expert Knowledge in Uncertainty Quantification (Are We Adding More Uncertainty or More Understanding?)

Jane M. Booker, Mark C. Anderson, and Mary A. Meyer

Optimal Reliability Apportionment

Nozer D. Singpurwalla

On Computing and Comparing the Reliability of Competing Networks

P.J. Boland, F.J. Samaniego, and E.M. Vestrup

Statistical Methods in Software Engineering for Defense Systems: Summary of a Workshop

Jesse Poore and Siddhartha Dalal

SPECIAL SESSION III: INFORMATION ASSURANCE

Network Evaluation via Activity Vector Clustering

Jeff Solka

Audit Data Analysis and Mining

Ningning Wu

Mining a Data Stream to Understand User Behavior

Diane Lambert

GENERAL SESSION III

Accelerated Testing: Obtaining Reliability Information Quickly

William Q. Meeker

CONTRIBUTED SESSION IX

A Special Topic in Risk Analysis

Bernie Harris

Exact Moments of the 2x2x2 Distribution

Robert Launer

Mixed Model Inference for Army Test and Evaluation

Thomas Mathew and David Webb

GENERAL SESSION IV

Visual Data Mining of Remote Sensing Data

Jürgen Symanzik