

PROGRAM

SIXTH U.S. ARMY CONFERENCE ON APPLIED STATISTICS

October 18-20, 2000
Hosted by Rice University

Monday, October 16

0800 - 0830 REGISTRATION (Duncan Hall [Martel Hall])

0830 - 0845 TUTORIAL WELCOME (Duncan Hall [Martel Hall])

Dan Willard, Office of the Deputy Undersecretary of the Army, Operations Research

0845 - 1145 TUTORIAL

Data, Knowledge, and Information Integration to Support Decision Making
Statistics Group, Los Alamos National Laboratory

1145 - 1300 Lunch (Faculty Club)

1330 - 1600 TUTORIAL

Tuesday, October 17

0830 - 1200 TUTORIAL (Duncan Hall [Martel Hall])

1200 - 1330 Lunch (Room DH3092)

1330 - 1600 TUTORIAL

1830 - Social and Registration (Duncan Hall [Martel Hall])

Wednesday, October 18

0800 - 0830 REGISTRATION (Duncan Hall)

0830 - 0900 CALL TO ORDER (Room DH1055)

WELCOME

James Thompson, Conference Host, Rice University

Kathy Ensor, Department of Statistics Chair, Rice University

OPENING REMARKS

Barry Bodt, Conference Chair, Army Research Laboratory

N. Radhakrishnan, Director, Computational & Information Sciences Directorate, Army Research Laboratory

0900 - 1030 GENERAL SESSION I (Room DH1055)

Chair: Barry Bodt, Army Research Laboratory

Warranty Contracts and Equilibrium Probabilities (Keynote Address)
Nozer Singpurwalla, George Washington University

Variance and Invariance in Machine Vision
Stuart Geman, Brown University

1030 - 1100 Break

1100 - 1215 SPECIAL SESSION ON BIOLOGICAL WARFARE (Room DH1055)

Chair and Organizer: Marek Kimmel, Rice University

Dispersal of Bacterial Pathogenes: Scenarios, Models and Accidents
Marek Kimmel, Rice University

Use of Genomic Technologies to Decode Bacterial Biological Warfare Agents
George Weinstock, Department of Molecular Virology & Microbiology, Baylor College of Medicine

1215 - 1330 Lunch (Room DH3092)

1330 - 1500 CONTRIBUTED SESSION I (*parallel session, Room DH1055*)

Chair: Paul Deason, TRADOC Analysis Center-White Sands Missile Range

An Investigation in the Use of Cluster Analysis in Helping to Establish an Operational Scenario for a Combat Simulation
Eugene Dutoit, Dismounted Battlespace Battle Lab, Fort Benning

A Human Factors Evaluation of the Custom Tent Deign used during the 1st Brigade TaskForce Lanes Exercise
Jock Grynovicki, Kragg Kysor, and Madeline Swann, Army Research Laboratory

A Quantitative Method for Evaluating Machine Translation Systems
Barbara D. Broome, Ann E. Brodeen, and Frederick S. Brundick, Army Research Laboratory, and Malcolm Taylor, OAO Corporation

1330 - 1500 CONTRIBUTED SESSION II (*parallel session, Room DH1049*)

Chair: Robert Launer, Army Research Office

Passive Unicast Network Tomography based on TCP Monitoring
Yolanda Tsang, Robert Nowak, and Mark Coates, Rice University

Modeling Transmission Loss in a Network with a Large Number of Nodes
Jayaram Sethuraman, Florida State University

Monte Carlo Filters and Its Applications in Target Tracking and Wireless Communications
Rong Chen, University of Illinois, Chicago

1500 - 1530 Break

1530 - 1700 CONTRIBUTED SESSION III (*parallel session, Room DH1055*)

Chair: Douglas Tang, Uniformed Services University of the Health Sciences

Clustering and Partial Mixture Estimation
David Scott, Rice University

Estimating Parameters in a Bimodal Distribution
Douglas Frank, Indiana University, Pennsylvania

Accurate Lower Tolerance Limits for the Normal Random Effects Model
Bernard Harris, University of Wisconsin, Madison and Shun-Yi Chen, Tamkang University

1530 - 1700 CONTRIBUTED SESSION IV (*parallel session, Room DH1049*)

Chair: Robert Burge, Walter Reed Army Institute of Research

Statistical Augmentation of a Database for Use in Optical Character Recognition Software Evaluation
Ann E.M. Brodeen and Frederick S. Brundick, Army Research Laboratory, and Malcolm Taylor, OAO Corporation

Another "New" Approach for "Validating" Simulation Models
Arthur Fries, Institute for Defense Analysis

Graphical Analysis of Communications Latency in a Large Distributed Simulation
Carl T. Russell, Joint National Test Facility

1830 - 2115 WILKS AWARD BANQUET (Duncan Hall [Martel Hall])

1830 - 1900 SOCIAL

1900 - 2000 DINNER

2000 - 2045 BANQUET ADDRESS

Lessons From the History of Wargaming

Matthew Caffrey (Air Command and Staff College)

2045 - 2115 PRESENTATION OF THE ARMY WILKS AWARD

Jock Grynovicki, Army Wilks Award Committee Chair, Army Research Laboratory

Edward Wegman, Previous Army Wilks Award Recipient, George Mason University

Thursday, October 19

0830 - 1000 GENERAL SESSION II (Room DH1055)

Chair: Wendy Martinez, Naval Research Office

Challenges for Categorical Data Analysis in the 21st Century

Alan Agresti, University of Florida

A Spatial-Temporal Statistical Approach to Problems in Command and Control

Noel A. C. Cressie (Ohio State University)

1000 - 1030 Break

1030 - 1200 SPECIAL SESSION ON THE DIGITAL GOVERNMENT (Room DH1055)

Chair and Organizer: Edward Wegman, George Mason University

Statistics and a Digital Government for the 21st Century

Cathy Dippo, Bureau of Labor Statistics

Web Dissemination of Disclosure-Limited Analyses of Confidential Data

Alan Karr, National Institute of Statistical Sciences

Sallie Keller-McNulty, Los Alamos National Laboratory

Statistics in Intrusion Detection

Jeffrey Solka, Naval Surface Warfare Center

1200 - 1330 Lunch (Room DH3092)

LUNCHEON ADDRESS

John Tukey (1915-2000): Deconstructing Statistics

James R. Thompson, Rice University

1330 - 1530 CLINICAL SESSION I (*parallel session, Room DH1055*)

Chair: Gene Dutoit, Dismounted Battlespace Battle Lab, Fort Benning

Panel: Paul Deason, TRADOC Analysis Center, White Sands Missile Range
Carl Russell, Joint National Test Facility
David Scott, Rice University

A Statistical Analysis of Course of Action Generation?

Barry Bodt, Joan Forester, Charles Hansen, Eric Heilman, Richard Kaste, and Janet O'May,
Army Research Laboratory

Efficient Search Strategies in High-Dimensional Complex Models

MAJ Tom Cioppa and Tom Lucas, Naval Postgraduate School

Statistical Analysis of Atmospheric Properties for Estimation of Infrared Radiance of Ballistic Missiles

CPT Scott Nestler, United States Military Academy

1330 - 1530 CONTRIBUTED SESSION V (*parallel session, Room DH1049*)

Chair: Bernie Harris, University of Wisconsin, Madison

Stochastic Properties for Uniformly Optimally Reliable Networks

Yontha Ath, California State University, Dominguez Hills and Milton Sobel, University of California, Santa Barbara

Reliability Described by Belief Functions, A Second Look

George Hanna, Army Materiel Systems Analysis Activity

Damage Assessment Using Test Data and Expert Testimonies

Yuling Cui and Nozer D. Singpurwalla, George Washington University

System Reliability for Precision Missilery

Mike Danesh, Aviation and Missile Research, Development and Engineering Center

1530 - 1600 Break

1600 - 1730 SPECIAL SESSION ON RELIABILITY (Room DH1055)

Highlights of the June 2000 "National Research Council Workshop on Reliability Issues for DoD Systems"

Chair and Organizer: Arthur Fries, Institute for Defense Analysis.

NRC Workshop on Reliability for DoD Systems--An Overview of the Statistical Content

Francisco Samaniego, University of California, Davis

NRC Workshop on Reliability for DoD Systems--A DoD Perspective
Ernest Seglie, Office of the Secretary of Defense, Operational Test & Evaluation

Friday, October 20

0830 - 1000 GENERAL SESSION III (Room DH1055)

Chair: James Thompson, Rice University

Quantile/Quartile Plots, Conditional Quantiles, Comparison Distributions
Emanuel Parzen, Texas A&M University

Innovative Bayesian Designs in Clinical Trials
Donald Berry (University of Texas, MD Anderson Cancer Center)

1000 - 1015 Break

1015 - 1115 CONTRIBUTED SESSION VI (Room DH1055)

Chair: David Cruess, Uniformed Services University of the Health Sciences

Modeling of Tank Gun Accuracy Under Two Different Zeroing Methods
David Webb, Army Research Laboratory and Bruce Held, RAND

Analysis of Fuzzy Regression for Modeling Shelf-Life of Gun Propellants
Iris Rivero and Kwang-Jae Kim, Penn State University

1115 - 1200 GENERAL SESSION IV (Room DH1055)

Chair: Alyson Wilson, Los Alamos National Laboratory

Conceptual Issues in Model Assessment: What Can We Learn From Past Mistakes
Naomi Oreskes, University of California, San Diego

1200 - ADJOURN