Interface Foundation of North America, Inc.
P.O. Box 7460
Fairfax Station, VA 22039-7460

June 29, 2007

SUBJECT: Army Conference on Applied Statistics

Dear Colleague,

The Executive Board for the Army Conference on Applied Statistics (ACAS) is pleased to announce that Rice University in Houston, TX will host its 13th annual meeting from October 17-19, 2007. ACAS, now a conference of the Interface Foundation of North America, is a forum for the presentation and discussion of theoretical and applied papers relating to the use of probability and statistics for solving defense- and security-related problems. Today's Department of Defense faces far-ranging challenges that include many topics to which probability and statistics can contribute. The development and advancement of defense systems draw upon varied techniques and tools such as reliability analysis, statistical computing, visual data mining, simulation, linear and stochastic modeling, data fusion, and experimental design. ACAS provides a constructive opportunity for interaction among academic, industry, and DoD scientists. It also serves a nurturing role in the elevation of statistical proficiency among DoD researchers in other disciplines who find themselves statistical practitioners because of the compelling benefits statistical science brings to DoD research, development, and testing.

An Introduction to Network Analysis, a 12-hour short course offered by Professor Stan Wasserman and Ms. Ann McCranie of Indiana University will precede the conference on October 15 & 16. Network analysis focuses on relationships between social entities, analyzing relational data measured on groups of social actors. Used widely in the social and behavioral sciences, network analysis has gained considerable attention in the defense and homeland security community in recent years. In this tutorial Prof. Wasserman and Ms. McCranie discuss the social network paradigm and present an introduction to various concepts, methods, and applications of network analysis. The course will be based in part on Prof. Wasserman's text, co-authored with Katherine Faust, *Social Network Analysis: Methods and Applications* (1999).

The conference program will also consist of invited talks by prominent investigators in various branches of statistics and applied probability as well as contributed papers of a technical, applied, or clinical nature. To date, the following distinguished researchers have been confirmed

for invited presentations: Ron Fricker (keynote, Naval Postgraduate School), Cliff Spiegelman (Texas A&M), Karen Kafadar (Colorado - Denver), Bruce West (Army Research Office), Mike Trosset (Indiana), Thomas Mathew (Maryland Baltimore County), Amarjit Budhiraja (North Carolina), and James Thompson (Rice).

This year's conference will feature two special sessions. The first, **Event Pattern Recognition for Counter-Terrorism** is being organized by Harry Chang (Army Research Office). In this session faculty members from Brown and Southern California will present current results on spatial-temporal nonlinear filtering, Bayesian networks, and anomaly detection that are developed specifically for applications in counter-terrorism. In addition, Bill Szewcyzk (National Security Agency) has arranged a special session entitled **Methods for the Analysis of Streaming Data** featuring presentations by researchers from the National Security Agency and the IBM Thomas J. Watson Research Center. The session will address the analysis of "data in motion" as compared with "data at rest" for massive amounts of data, and contrast the methodologies required.

The technical sessions of the conference will also feature contributed papers by DoD scientists, and academic and industrial scientists, including investigators under contract to DoD. Contributed papers can range in content from new research to well-posed problems in which statistical methods are applied to solve specific DoD problems. Speakers are strongly encouraged to present their papers in terms of the potential or real problems that motivated the work. Results that rely on relatively recent or specialized results in the theory of statistics and probability should be explained in sufficient detail to permit an audience of statistical practitioners with broadly varying backgrounds to use the results to enhance their own problem-solving capabilities.

Clinical sessions, a distinct element of ACAS, accept unresolved problems in applied statistics. A panel of experts, comprised of invited speakers and other distinguished attendees offer guidance on how to proceed. Authors of a clinical paper must provide a brief description of the problem by September 21, 2007 in order that panelists have sufficient time to prepare their recommendations. We invite you to consider this opportunity to present an interesting statistical problem to some of the country's leading applied and mathematical statisticians.

Participation from many activities is sought to ensure a mixture of science and application. A call for papers is hereby extended. Speakers will be notified regarding paper acceptance no later than September 8. It may become necessary to limit the number of papers, so a timely response is recommended. To submit a paper for consideration, please send the following

information by August 31 to Barry A. Bodt, U.S. Army Research Laboratory, ATTN: AMSRD-ARL-CI-CT, Aberdeen Proving Ground, MD 21005-5067. (Electronic mail sent to babodt@arl.army.mil is preferred.)

1. Title of paper, and a short abstract.
2. Name of author(s) and exact title of the organization(s).
3. Type of paper (technical or clinical).
4. Equipment needed (digital projector, overhead projector, etc.).
5. Telephone number of the author(s) (DSN or commercial).
6. E-mail address of the author(s).

Technical papers are nominally allowed 30 minutes, to include 5 minutes at the end for audience discussion and questions. Of the 40 minutes available for clinical papers, approximately 15 minutes are recommended for the problem statement, allowing 25 minutes for panel discussion.

The Army Conference on Applied Statistics also marks the occasion when the Army Wilks Award is presented for significant contributions to the U.S. Army in statistical research or applications relevant to the Army. This year the Board is accepting open nominations for award candidates. Letters of nomination should include the nominee's vita relevant to Army service, and should be mailed by August 24, 2007 to Jock O. Grynovicki, U.S. Army Research Laboratory, ATTN: AMSRD-ARL-HR-MX, Aberdeen Proving Ground, MD 21005-5425.

This year's conference and short course will be held on the campus of Rice University, one of the nation's leading academic and research institutions, in downtown Houston. The university is located near Houston's Theatre District and is adjacent to the internationally renowned Texas Medical Center. With its demographically and culturally diverse population of over 2 million people, Houston is the nation's fourth largest city. Among Space City's major tourist attractions include the Johnson Space Center, the acclaimed Museum and Theater Districts, the Downtown Aquarium, the Galleria shopping mall, historic Sam Houston Park and several professional sports teams. If you are planning to see some of the area when you arrive, be sure to visit the Greater Houston Convention and Visitors Bureau website: www.visithoustontexas.com.

A host letter providing more detailed information regarding registration fees, additional lodging, agenda, etc. will follow in early September. Prior to this mailing, information concerning the conference and tutorial can be obtained via the Internet at www.armyconference.org. This site will be periodically updated as details finalize. Any additional inquiries concerning the conference

may be directed to Barry A. Bodt at the address noted previously, by phone (410-278-6659), or by fax (410-278-4988).

Sincerely,

David W. Webb
U.S. Army Research Laboratory
Aberdeen Proving Ground, MD

Executive Board of the U.S. Army Conference on Applied Statistics	
Barry A. Bodt (Chair) *U.S. Army Research Laboratory*	
J. Robert Burge *Walter Reed Army Institute of Research*	Harry Chang *U.S. Army Research Office*
David F. Cruess *Uniformed Services University of the Health Sciences*	Paul J. Deason *Science Applications International Corporation*
Lee S. Dewald, Sr. *Virginia Military Institute*	Arthur Fries *Institute for Defense Analyses*
LTC(P) Andrew G. Glen *United States Military Academy*	Jock O. Grynovicki *U.S. Army Research Laboratory*
Robyn B. Lee *U.S. Army Center for Health Promotion and Preventive Medicine*	Wendy L. Martinez *Office of Naval Research*
Timothy E. Powers *Walter Reed Army Institute of Research*	Carl T. Russell *CTR Analytics*
LTC Rodney X. Sturdivant *United States Military Academy*	Douglas B. Tang *Uniformed Services University of the Health Sciences*
Calandra R. Tate *U.S. Army Research Laboratory*	Jacqueline K. Telford *Johns Hopkins University Applied Physics Laboratory*
David W. Webb *U.S. Army Research Laboratory*	Edward J. Wegman *George Mason University*
Charles E. White *Walter Reed Army Institute of Research*	Alyson Wilson *Los Alamos National Laboratory*