

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

June 23, 2011

SUBJECT: Army Conference on Applied Statistics

Dear Colleague,

The Executive Board for the Army Conference on Applied Statistics (ACAS) is pleased to announce that its 17th annual conference will be held from October 19-21, 2011 in Annapolis, MD. ACAS is a conference of the Interface Foundation of North America and leading 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. ACAS and its predecessor Conference on the Design of Experiments in Army Research, Development & Testing are now in the 57th consecutive year of providing valuable opportunities for constructive interaction among academic, industry, and DoD scientists. ACAS 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.

Upon its founding in 1995, ACAS moved beyond the Army to include all the services, while keeping its historical ties to the Army. ACAS also broadened the focus of its parent conference to keep pace with the expanding roles that probability and statistics can contribute to the development and advancement of defense systems. The conference has welcomed presentations on far-ranging techniques and tools such as reliability analysis, statistical computing, visual data mining, simulation, linear and stochastic modeling, and data fusion.

This year's conference program will include 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:

- Bruce West, keynote (Army Research Office, "Network Science & Statistics")
- Maksim Tsvetovat (George Mason, "Agent Based Modeling and Simulation")
- Sidney Resnick (Cornell, "Heavy Tailed Statistics")
- Carey Priebe (Johns Hopkins, "Quantitative Horizontal Scanning")
- Peter Qian (Wisconsin, "Nested Latin Hypercube Designs")

This year's conference will also feature three special sessions on the following topics: Reliability (organized by Frank Samaniego, California-Davis); Game Theory (Harry Chang, Army Research Office); and Army Applications (COL Andy Glen, United States Military Academy).

The technical sessions of the conference will 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 19, 2011 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.

The Executive Board of ACAS is also pleased to announce that COL Rodney Sturdivant of the United States Military Academy and Ohio State University will present a free short course for registered conference attendees, "Applied Logistic Regression", prior to the conference on October 17 & 18. Logistic regression has become the standard method of analysis when in describing the relationship between a response variable and one or more explanatory variables, the response variable is discrete, taking on two or more possible values. Logistic regression models offer advantages both in terms of model fitting and interpretation that have led to widespread use in a variety of fields, especially medical

studies. The focus of the course will be on the methodology and interpretation of these models. This training will cover material from the popular book "Applied Logistic Regression, 2nd ed." by Hosmer & Lemeshow, with additional/new material from the 3rd edition currently in writing.

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 9. 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 September 6 to Barry A. Bodt, U.S. Army Research Laboratory, ATTN: RDRL-CII-C, Aberdeen Proving Ground, MD 21005-5067. (Email sent to barry.a.bodt@us.army.mil is preferred.)

- 1. Title of paper, and a brief 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 Sep. 23, 2011 to U.S. Army Research Laboratory, ATTN: RDRL-HR (Jock Grynovicki), APG, MD 21005-5425.

This year's conference and short course will take place at the O'Callaghan Annapolis Hotel in the historic capital city of Annapolis, Maryland. Located within 30 miles of both Baltimore and Washington, DC, this port city takes pride in its maritime heritage and prominence in Colonial history. Annapolis served briefly as our nation's capital in the 1780's, and since 1845 has been the home of the U.S. Naval Academy. Its waterside location makes Annapolis a magnet for popular cultural events such as seafood

festivals, outdoor Navy band concerts and boat shows. At the heart of the business district is City Dock, where many of the city's original 18th century buildings still stand. Amazing shops and restaurants dot the waterfront, tempting patrons with unique wares and mouthwatering crab cakes. If you are planning to see some of the area when you arrive, be sure to visit the Annapolis & Anne Arundel County Conference & Visitors Bureau website, www.visitannapolis.org/index.aspx.

A host letter providing more detailed information regarding registration fees, additional lodging, agenda, etc. will follow in September. After this mailing, information concerning the conference and short course will be made available 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

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