Program in Brief

The program outline appears below. We welcome technical papers discussing methods or applications with a *potential* tie to defense and security issues. More details on the conference will be available. Check http://www.armyconference.org for official updates. We are also using http://mysite.verizon.net/acas08 to stage site development. That is a good site if the other is unavailable..

- **Welcome:**

  COL William J. Stockwell, Acting Deputy Superintendent for Academics and Acting Dean of the Faculty, Virginia Military Institute

  COL Lee Dewald, Head of Mathematics and Computer Science Department, Virginia Military Institute

- **Short Course:**
  A short course on "An Introduction to R," offered by Di Cook of Iowa State University will precede the conference on 20-21 October.

- **Invited Speakers:**

  - Richard L Smith (North Carolina)
    Risk and Extremes

  - Andrew G. Glen (United States Military Academy)
    Diane Evans, Rose-Hulman Institute of Technology
    John Drew, William and Mary
    Larry Leemis, William and Mary
    Applications of a Probability Programming Language

  - Edward Wegman (George Mason University)
    Text Mining and Social Networks: Some Unexpected Connections

  - Wendy Tam Cho (Illinois Urbana-Champaign)
    Breaking the (Benford) Law: Statistical Fraud Detection

  - Doug Wolfe (Ohio State)
    Ranked Set Sampling: What, Why, When, and How

- **Banquet Speaker:**
  - Edward (Ed) L. Dooley, Jr., Special Assistant to the Superintendent (Virginia Military Institute)
    A College for the Future: General Francis H. Smith and the Creation of the Virginia Military Institute

- **Special Sessions:**

  - Statistics and Stochastics for Network Science
    Organizer: Mouhsiung (Harry) Chang (Army Research Office)

- - ■ *Compression and Analysis of Golden Gate Bridge Sensor Data*
    Bin Yu, UC Berkeley

  - ■ *Energy-efficient Multi-target Tracking Using Sensor Networks*
    Venu Veeravalli, Illinois at Urbana-Champaign

  - ■ *Network Routing in a Dynamic Environment*
    Nozer D. Singpurwalla, George Washington

  - ■ *Dynamic Network Science: Stochastic Modeling and Statistical Analysis*
    Gangaram Ladde, South Florida

  - ○ Mitigation of Technology Surprise
    Organizers: Jeff Solka (NSWC) & Wendy Martinez (JWAC)

    - ■ *Technology Tensors*
      Steve Thompson, Defense Intelligence Agency

    - ■ *Semantic Analysis of the Term-Document Matrix*
      Avory Bryant, Naval Surface Warfare Center

    - ■ *Trend Analysis for the Mitigation of Technology Surprise*
      Nick Tucey, Naval Surface Warfare Center

  - ○ Risk Analysis for the Military
    Organizer: David Banks (Duke)

    - ■ *Multiagency Coordination and Response: Case Study of the London Tube Bombings*
      Joe Eyerman, RTI International

    - ■ *Adversarial Risk Analysis*
      David Banks, Duke University

    - ■ *Statistical Issues in Soft Error Rate Estimation*
      Sarah Michalak, Michael Hamada, Nick Hengartner, Los Alamos National Laboratories

- ● **Contributed Speakers:**

  Global Warming as a Problem in Statistical Physics
  Bruce West (Army Research Office)

  An Automated Tool for Developing Experimental Designs: CADRE
  Robert C. Williges (Virginia Tech)
  Sam Middlebrooks (Army Research Laboratory)

  Fusion of Asynchronous Parallel Unreliable Data Streams
  Ann E.M. Bornstein (Army Research Laboratory)
  John H. Brand (Army Research Laboratory)
  Michelle C. McVey (Army Research Laboratory)

Optimal Fits to Lambda Distributions
Jerry Alderman (Raytheon Missile Systems)
Allan T. Mense (Raytheon Missile Systems)

Two Useful Descriptive Statistical Techniques
Carl T. Russell, CTR Analytics

A Brief History of DoD Data Analysis and Statistical Modeling
James R. Thompson (Rice)

Hybrid Influence Diagrams for Threat Identification
Barry R. Cobb (Virginia Military Institute)

A Comparison of Major Machine Learning Methods in Classification of Anthrax Time Series from Inhalation Anthrax Models
Rui Xu (Missouri University of Science & Technology)
Robert S. Woodley (Missouri University of Science & Technology)
Donald C. Wunsch II (Missouri University of Science & Technology)

Correct Specification of Bayes Hierarchical Models
Jayaram Sethuraman (Florida State)

A Family of Combinatorial Identities with Applications
Bernard Harris (Wisconsin)

From Wealth to Democracy? An Analysis Using Multi-State Event History Models
Carol Atkinson (Vanderbilt)
Giacomo Chiozza (Vanderbilt)

A Reliability Growth Simulation Test Bed
Paul Ellner (US Army Materiel Systems Analysis Activity)
Martin Wayne (US Army Materiel Systems Analysis Activity)

Detecting Tiny Signals in Massive Data: The Dual of the Problem Addressed by Robust Methods
Karen Kafadar (Indiana University, Bloomington)
Robert L. Jacobsen (California-Berkeley)

Comparing the Johnson and Generalized Lambda Distributions
Allan T. Mense (Raytheon Missile Systems)
Jerry Alderman (Raytheon Missile Systems)
David King (Raytheon Missile Systems)

Streaming Poisson Data
David W. Scott (Rice)

Small Arms Dust Test Reliability Analysis Approach
Kristin Hogg (US Army Evaluation Center)
Andrew Rose (US Army Evaluation Center)

Scan Statistics for Bio-Warfare Monitoring
George Terrell (Virginia Tech)

Unusual and Statistically Significant Changes in Age-distribution of Last Year's Influenza Epidemic (Similar to the Spanish Flu) Warrants Re-evaluation of Vaccine Prioritization Policy
Barbara Billauer (Institute of World Politics)

New Developments in Classification Trees
Wei-Yin Loh (Wisconsin)

Missile Battery Experiment
William C. Thomas (Raytheon Missile Systems)

Data Augmentation for Quantal Response Estimation
David W. Webb (Army Research Laboratory)
Scott E. Schoenfeld (Army Research Laboratory)

On Estimating Component Characteristics from System Failure-Time Data
Francisco J. Samaniego (California, Davis)

Complex Dependence Structure and its Effect on Risk Assessment
Katherine B. Ensor (Rice)

A Field Test of an Unmanned Ground Vehicle
Barry A. Bodt (Army Research Laboratory)

Netcentric Systems Evaluations
Jock O. Grynovicki (Army Research Laboratory)

- **Events:**
  - Social: Tuesday, October 21
  - Wilks Award Banquet: Wednesday, October 22