

SECOND ANNOUNCEMENT AND REGISTRATION FORM

35th Symposium on the Interface: Computing Science and Statistics

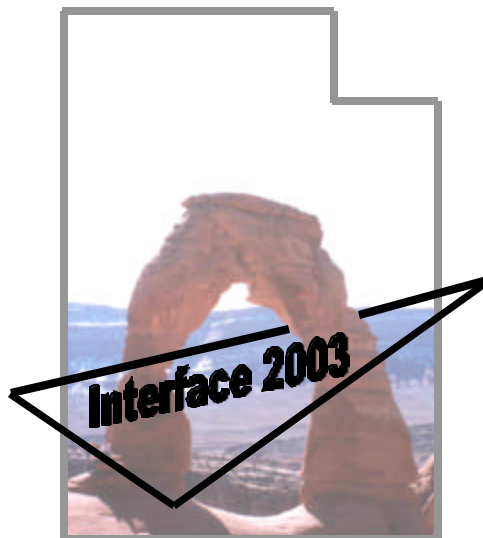
Theme: Security and Infrastructure Protection

March 12-15, 2003
Sheraton City Centre Hotel
Salt Lake City, Utah

<http://www.math.usu.edu/~iface03>

Keynote Speaker: James R. Thompson
Rice University

*Considerations of Inspection for Homeland Security with Cross Linkages to
Quality Control, Game Theory, and Stochastic Simulation*



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COOPERATING ORGANIZATIONS

ASA, CSNA, ENAR, IASC, IMS, INFORMS, SIAM and WNAR

General Information

AN INVITATION

The Interface Foundation of North America cordially invites you to participate in the 35th Interface Symposium, the premier annual international conference on the interface of computing science, statistics, and one or more disciplinary sciences. IFNA (<http://www.galaxy.gmu.edu/stats/IFNA.html>) is a non-profit educational corporation founded in 1987 to sponsor the symposia and publish the proceedings. It is also a co-publisher of the *Journal of Computational and Graphical Statistics*.

The theme this year is Security and Infrastructure Protection. Beyond homeland security issues, statistical methods can be applied in many fields to heighten protection: biological threats, computer intrusion, surveillance systems, and financial fraud are only a few areas of particular interest. The keynote address this year will be given by James R. Thompson of Rice University.

CONTACT INFORMATION

Conference Chairs:

Michael C. Minnotte, Utah State University, minnotte@math.usu.edu

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CALL FOR PARTICIPATION

Sessions will include invited, refereed, and contributed papers. There will also be several short courses held in conjunction with the 35th symposium on the Interface. The Proceedings of Interface 2003 will be published by IFNA as a CD-ROM. Page restrictions have been raised, and color illustrations, animations, data, and software source code will be allowed. **Individuals who wish to participate in a contributed session should submit an abstract by February 5, 2003.** Full instructions and an electronic abstract submission form are available on the conference web site, <http://www.math.usu.edu/~iface03/>. The opportunity to submit a paper for refereeing closed on January 17, 2003.

REGISTRATION AND FINANCIAL SUPPORT

Before February 5, 2003, registration is \$215 for members of Interface; after February 5, registration rises to \$265. Individuals whose Interface membership dates back to at least Interface 2002 may take an additional \$15 long-term member discount - \$200 by February 5, \$250 after. For individuals who are not members of Interface, registration is \$295 before February 5 and \$350 after February 5. Members of cooperating societies receive discounted registration. For members of co-operating societies, registration before February 5 is \$250; after, it is \$300. Regular participants in the Interface Symposium Series are strongly encouraged to join Interface. There also is a student registration fee of \$110 before February 5, \$150 after February 5, and a one-day registration fee of \$130 before February 5, and \$150 after. **In order to enroll in the short courses, participants must be registered for the conference.** The one-day registration does not include the banquet. All other registered participants attend the banquet at no additional charge. Guest tickets for the banquet may be purchased for an additional \$50 per ticket. Limited funds are available to support travel and per diem expenses: preference will be given to young researchers and graduate students, with a priority to those presenting papers.

HOTEL ACCOMODATIONS

Accommodations will be at the Sheraton City Centre Hotel, Salt Lake City, Utah. The hotel is located at 150 West 500 South in downtown Salt Lake City, just a few miles east of the Salt Lake City International Airport. The hotel offers a resort atmosphere in the center of the city, with outdoor and indoor pools, sauna, and fitness center. The hotel offers STSN T1 high-speed internet access in all guest rooms.

A block of rooms has been reserved for Interface 2003 participants. The rate is \$119 for a single room and \$129 for a double room. Please call the hotel directly at (800) 421-7602 from outside Utah or (801) 401-2000 from within Utah to make your reservations by 5pm MST, February 10, 2003, and be sure to mention the name of the conference in order to obtain these rates. The hotel can also be contacted by FAX (801) 534-3450. Rooms are available at this special rate for the nights of Tuesday March 11 through Saturday March 15, 2003.

SHORT COURSES

Two short courses are planned for Interface 2003.

Short Course I: Statistical Methods in Computer Security

David Marchette, Naval Surface Warfare Center

Computer security is an important aspect of homeland defense. Statistics has quite a lot to offer to the problems of detecting, modeling and defeating attacks against computers and the Internet. This course will provide a brief introduction to the network protocols, at a level sufficient to understand the data relevant to detecting and measuring network attacks. Statistical methods of detection will be discussed for various types of attacks. Topics will include attacks against networks such as denial of service attacks and attacks against hosts, such as buffer overflow attacks and user masquerading. Data analysis and visualization relevant to network and intrusion data will be discussed. Pointers to data collection utilities will be provided so that students will be able to apply what they learn in the course to their own systems and networks

Short Course II: Topics in Computational Statistics with MATLAB

Jeffrey Solka, Naval Surface Warfare Center

The objectives of this short course are (1) to present an overview of various topics in computational statistics and (2) to show how these can be accomplished using MATLAB. The major emphasis in the course will be on the first objective. Thus, while knowledge of MATLAB would be useful, it is not required for this course. The areas we will discuss include Monte Carlo hypothesis testing, dimensionality reduction, exploratory data analysis, probability density estimation, model-based clustering and cross-validation. Methods and tools will be demonstrated within the context of an information retrieval problem.

THE PROGRAM

Security & Infrastructure Protection: Interface of Computing Science & Statistics to the Rescue

Organizer: Arnold Goodman, University of California, Irvine

Ted Senator: To be announced

David Marchette: *Statistical Opportunities in Network Security*

Carla Brodley: To be announced

Bioinformatics

Organizer: Adele Cutler, Utah State University
John Storey: *Exploratory Detection of Differential Gene Expression*

Jane Fridlyand: *Statistical Issues in the Analysis of the CGH Data*

Rafael Irizarry: *Exploration, Normalization, Summaries and Software of Affymetrix GeneChip Probe Level Data*

Statistical Analysis and Probabilistic Modelling of Internet Traffic

Organizer: Steve Marron, University of North Carolina

Felix Hernandez-Campos: *Statistical Clustering of Internet Communication Patterns*

Bill Cleveland: To be announced

Cheolwoo Park: *The Joint Distribution of Internet Flow Sizes and Durations*

Computational Statistics and NSA

Organizer: William Szewczyk, National Security Agency

Sallie Keller-McNulty: To be announced

Jeff Benedict: To be announced

David Scott: *Model Building and Diagnostics for Massive Data Sets*

R

Organizers: Robert Gentleman, Harvard University, and Duncan Temple Lang, Bell Labs, Lucent Technologies

David James: *A Unified Database Interface for S*

Duncan Temple Lang: To be announced

Pin Ng: *Sparse Linear Algebra for the R Language*

Discussant: Robert Gentleman, Harvard University

Data Analysis and Visualization of Graph Data

Organizer: Deborah Swayne, AT&T

Chris Volinsky: *Using Graphs to Explore Communication Networks*

Robert Gentleman: *Graphs and EDA in Computational Biology*

Deborah Swayne: *Visual Exploration of Graph Data*

Usability and Accessibility of Visualization Tools for Health Statistics

Organizers: Sue Bell and Linda Pickle, National Cancer Institute

Linda Williams Pickle: *Usability Testing of Map Designs*

Dan J. Grauman: *Accessible Graphics on the World Wide Web*

Jim X. Chen: *Java-based Dynamic Linked Micromap Plots*

Sanjay J. Koyani: *Web Design and Usability Guidelines: An Evidence-based Approach*

Financial Risk and Fraud Detection

Organizer: Scott Grimshaw, Brigham Young University

Conan Albrecht: *Computer-Aided Fraud Detection*

Gary Ottosen: *Credit Scoring Using Bureau and Other Data*

Scott Grimshaw: *Some Loans are More Equal than Others: Third-party Originations and Defaults in the Subprime Mortgage Industry*

Gökhan Aydinli: *Efficient and Secure Statistical Computing in Office Applications*

Computationally Challenging Statistical Methods in Genetics

Organizer: Natascha Vukasinovic, Monsanto Company

Fengxing Du: *Statistical and Computational Issues in Mapping Genes in Animal Populations*

Ignacy Misztal: *Computations in Animal Breeding*

Alun Thomas: *Enumeration and Simulation of Marriage Node Graphs on Zero Loop Pedigrees*

Advances in Face and Pattern Recognition

Organizer: Shailaja Suryawanshi, Merck

Sarat Dass: *Obtaining Smooth Directional Field Estimates for Fingerprint Images*

Diego Socolinsky: *A Boosted CCD Classifier for Fast Face Detection*

Commerce Infrastructure Security

Organizer: Stacey Hartley, Pacific Northwest National Laboratory

William Cliff: *PNNL and International Border Security*

Steve Clemmons: To be announced

Sensors for Biological Threats

Organizers: Sandra Thompson and Sharon Wunschel, Pacific Northwest National Laboratory

Todd Ritter: *Identification of Bio-warfare Agents and Other Applications of Molecular Biology*

Bart Weimer: To be announced

Stephen Morse: To be announced

Best of KDD-2002

Organizer: Arnold Goodman, University of California, Irvine

Chris Stolte: To be announced

Saharon Rosset: *Customer Lifetime Value Modeling and Its Use for Retention Planning*

Eamonn Keogh: *Doing Something Useless Slightly Faster: The State of the Art in Time Series Data Mining?*

Homeland Security and Related Issues

Organizer: Alan Karr, National Institute of Statistical Sciences

Deborah Leishman: *Areas of Homeland Security: At the Computational Statistical Interface*

Andrew Moore: *Rule-Based Anomaly Pattern Detection for Detecting Disease Outbreaks*

Ashish Sanil: *Pointers from Research on Data Confidentiality and Data Quality*

Modern Text Processing, Management, and Distribution

Organizer: Jürgen Symanzik, Utah State University

Jan de Leeuw: *The Journal of Statistical Software*

Edward J. Wegman: *Preparing Electronic Books*

Zdenek Hlavka: *Electronic Books for Experts, Dummies, and Users*

Social Networks and Statistics

Organizer: Jeff Solka, Naval Surface Warfare Center

Peter Dodds: *Ultra-Robust and Scalable Networks Based on Hierarchies*

Peter Hoff: *Random-Effects Models for Network Dependence*

Mark Handcock: To be announced

Smoothing and Nonparametric Feature Detection

Organizer: Michael Minnotte, Utah State University

Steve Marron: *A SiZer Analysis of IP Flow Start Times*

Naisyin Wang: *Longitudinal Kernel Regression*

Michael Schimek: *Semiparametric Regression Smoothing and Feature Detection*

Statistical Issues in Computer Security

Organizer: David Marchette, Naval Surface Warfare Center

Stephan Bohacek: *Worm Propagation on Graphs with Heavy-tailed Degree Distribution*

Tom Goldring: To be announced

Robert Goldman: *A Stochastic Model of Computer Intrusions for Evaluation and Exercises*

Dipankar Dasgupta: *Multi-Level Monitoring and Fuzzy Clustering to Detect Cyber Attacks*

Digital Government Research in Support of Federal Statistics

Organizers: Cathryn Diplo and Steve Cohen, Bureau of Labor Statistics
Eduard Houy: To be announced
Gary Marchionini: *Interfaces to a Statistical Knowledge Network*
Sarah Nusser: *New Approaches to Mobile Computing for Field Data Collection*

Best of the IASC

Organizer: John Hinde, National University of Ireland, Galway
Claudio Conversano: *Incremental Algorithms for Missing Data Imputation based on Recursive Partitioning*
Simon Urbanek: *Different Ways to See a Tree - KLIMT*
Walter Zucchini: *WiSP: An R library for Simulating Wildlife Surveys*

Power Grid Infrastructure Security

Organizers: Dale Anderson and Sandra Thompson, Pacific Northwest National Laboratory
Jeff Dagle: *Energy Infrastructure Vulnerability Assessments*
William Flynt: To be announced
Massoud Amin: To be announced

Best of the JCGS

Organizer: David Scott, Rice University
Shane Pankratz: *Penalized Survival Models and Frailty*
Randy Eubank: *Adaptive Order Selection for Spline Smoothing*
Ramani Pilla: *An Adaptive Spatial Scan Density Estimation Method*

Surveillance

Organizer: Edward Wegman, George Mason University
Eric Kolaczyk: *Multiscale 'Spatial' Analysis of Network Data: Putting Wavelets on Graphs*
John T. Rigsby: *Social Networks and Computer Networks*
Jeffrey L. Solka: *Classification Complexity Measures and Their Relationship to Feature Selection*

Prediction of Catastrophic Events

Organizer: Amy Braverman, Jet Propulsion Laboratory
Andrea Donnellan: *Detecting Features in Seismic and Geodetic Data*
David Pierce: *Predicting Damaging Climate Events: Methods, Examples, and Public Reaction*
Clark Chapman: *Predicting and Comprehending Asteroid Impacts*

Public Health Preparedness and Response in Crisis

Organizer: Jimmie D. Givens, National Center for Health Statistics
Bill Henriques: To be announced
Myron Katzoff: *Using Design-Based Adaptive Sampling Procedures in Site Decontamination*
David Banks: *Game Theory and Risk Analysis for the Smallpox Threat*

Interactive GeoGraphics for the Web

Organizer: Robert M. Edsall, Arizona State University
John Guthrie: To be announced
Michael Peterson: *Flight Tracking Mapping and Visualization*
Robert M. Edsall: To be announced

Data Management for Statistical Data Bases

Organizer: Andrew Westlake, Survey & Statistical Computing, London, UK
Arie Shoshani: *Database Technology for Statistical Data*
Andrew Westlake: *Data Structures for HIV and AIDS Notification and Analysis*
Wilfried Grossmann: *Metadata Usage in Statistical Computing*

Forests at Risk

Organizer: Gretchen Moisen, USDA Forest Service
Mark Finco: *Satellite to the Public in Near Real-Time: Providing Active Wildfire Information with MODIS Rapid Response*
D. Richard Cutler: *Identifying "Redtops": Classification of Satellite Imagery for Tracking Mountain Pine Beetle Progression through a Pine Forest*
Thomas Edwards: *Design Attributes for Sampling Rare Ecological Events in Forest Ecosystems: Lichens in the Pacific Northwest*

Statistical Methods to Compress and Query Large Databases and Data Streams

Organizer: Silvia Nittel, University of Maine
Cyrus Shahabi: To be announced
Muthu Muthukrishnan: To be announced

Data Mining Combat Simulations

Organizer: Barry A. Bodt, U.S. Army Research Laboratory
Barry A. Bodt: *Data Mining Combat Simulations: an Emerging Opportunity*
Wei-Yin Loh: *Regression Tree Analysis of Battle Simulation Data*
David B. Kim: *Robust Modeling Based on L2E Applied to Combat Simulation Data*
T. Warren Liao: *Discovery of Battle States Knowledge from Multi-Dimensional Time Series Data*

SALT LAKE CITY, UTAH

Salt Lake City is a dynamic urban center offering a host of exciting things to see and do. Downtown attractions are the Salt Palace Convention Center, Symphony Hall, Capitol Theatre, and the Delta Center for the sports and entertainment enthusiasts. The world famous Mormon Tabernacle Choir performs regularly at "Historic Temple Square". Trolley Square, Crossroads Plaza, and ZCMI Mall provide shopping and eating facilities. Salt Lake City was the host of the 2002 Winter Olympics.

GETTING AROUND IN SALT LAKE CITY

Salt Lake City International Airport serves arrivals and departures for domestic and international carriers. It is located less than 5 miles west of downtown Salt Lake City, approximately 10 minutes away from the city. **Shuttle Service:** A complimentary shuttle service to and from the Salt Lake City International Airport is available for guests of the Sheraton City Centre Hotel from 6:00 a.m. to 11:30 p.m. daily (please make reservations directly with the hotel). **Public Transportation:** Buses and the TRAX light-rail system run regularly to all major destinations within the Salt Lake valley.

SALT LAKE CITY WEATHER

Salt Lake City in March has an average high of 53° Fahrenheit and an average low of 33° Fahrenheit. Average precipitation (often snow) in March is 1.8 inches. When the snow falls, Salt Lake becomes a winter paradise. Skiers come from around the world to ski world-class resorts and The Greatest Snow on Earth!™ An average 535 inches of light, dry powder snow falls on the Wasatch Range just 35 minutes from downtown.

CONFERENCE SCHEDULE

Date	Events
Wed. March 12	<ul style="list-style-type: none">•Registration begins•Short Course I: <i>Statistical Methods in Computer Security</i> (8:00 a.m. - noon) David Marchette, Naval Surface Warfare Center•Short Course II: <i>Topics in Computational Statistics with MATLAB</i> (1:30 p.m. - 5:30 p.m.) Jeffrey L. Solka, Naval Surface Warfare Center•Evening Mixer (8:00 p.m. - 10:00 p.m.)
Thurs. March 13	<ul style="list-style-type: none">•Keynote Address (8:00 a.m. - 9:45 a.m.)•Technical sessions begin (10:30 a.m. - 5:45 p.m.)•Conference Banquet (7:00 p.m. - 10:30 p.m.)
Fri. March 14	<ul style="list-style-type: none">•Technical sessions continue (8:00 a.m. - 5:45 p.m.)
Sat. March 15	<ul style="list-style-type: none">•Technical sessions continue (8:00 a.m. - noon)

REGISTRATION NOTES

- For inquiries about registration, please contact Ms. Liz Quigley, (703) 993-1680, or via email, liz@galaxy.gmu.edu.
- Registration for Interface includes all Interface sessions, the banquet, and the conference CD (mailed after the conference).
- Full-time students: Please attach proof of your full-time student status - a letter from your department chair is required.
- Participants in short courses must be registered for the meeting (at least for a single day).
- On-site registration will be available.
- If you select and pay for IFNA membership then you can register at IFNA rates for Interface and the courses (i.e., membership is effective immediately).
- If you are a long-term IFNA member (i.e., at least a member since Interface 2002 and have your membership renewed for 2003) then you can register at long-term IFNA rates for Interface.
- Cooperating Societies are: ACM, ASA, CSNA, ENAR, IASC, IMS, INFORMS, SIAM, and WNAR.

SOME WEBSITES OF INTEREST

<http://www.math.usu.edu/~iface03/>
http://www.starwood.com/sheraton/search/hotel_detail.html?propertyID=1327
<http://www.visitsaltlake.com/home.shtml>
<http://skiutah.com/>
<http://www.americanparknetwork.com/parkinfor/>

MEETING REGISTRATION FOR INTERFACE 2003

35th Meeting of the Interface, INTERFACE 2003, March 12-15, 2003

Name _____ (As will appear on your nametag)

Job Affiliation _____ (As will appear on your nametag)

(Indicate whether this is a work address or home address.)

Address _____

City _____ State or Province _____

ZIP or Postal Code _____ Country _____

Telephone _____ E-mail _____

Join Interface now (and attend at the Member rates of \$215/\$265), \$35

The lower rate for all fees is for registration received by February 5, 2003. All late registration will be at the second (higher) rate.

Conference fees (with 1 Banquet ticket included, except single-day registrants)

Long-term Interface member, since at least Interface 2002, \$200/\$250

Interface member, \$215/\$265

Member of Cooperating Societies, \$250/\$300

Not a member of either Interface or Cooperating Societies, \$295/\$350

Student Registration (no proceedings), \$110/\$150

Single Day Registration (no banquet, no proceedings), \$130/\$150

Interface Short Course Registrations (At least one-day Conference Registration Required)

Attendees who are members of Interface or Cooperating Societies, one course, \$165/\$195

Attendees who are members of Interface or Cooperating Societies, both courses, \$225/\$255

Attendees who are not members of Interface or Cooperating Societies, one course, \$225/\$255

Attendees who are not members of Interface or Cooperating Societies, both courses, \$350/\$380

Students, one course, \$75/\$105

Students, both courses, \$100/\$130

If only one course is taken, circle appropriate one: **I: Computer Security** **II: MATLAB**

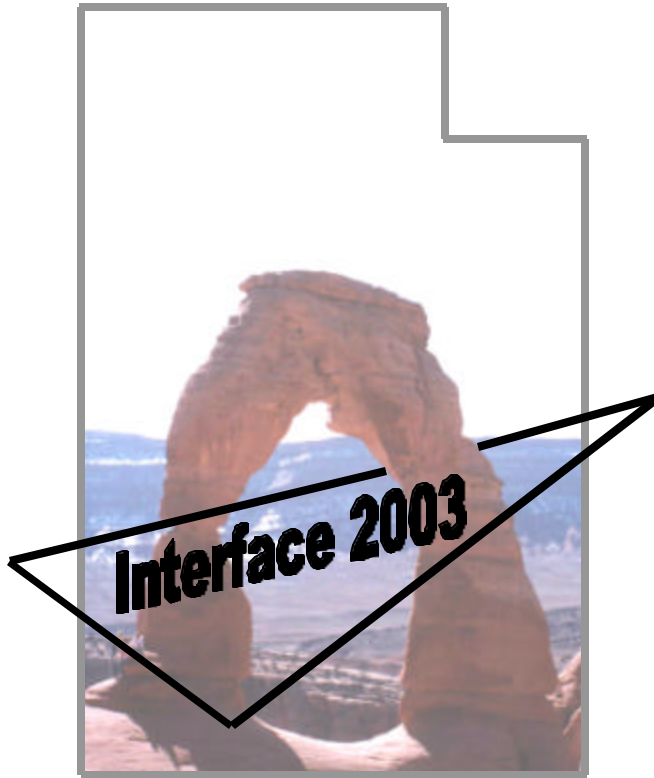
Guest Banquet Tickets @ \$50 each Total Amount Enclosed _____

Make checks payable to Interface. Mail to: Interface 2003, P.O. Box 7460, Fairfax Station, VA 22039-7460, USA, or fax to: (703) 993-1700 (attention: Ms. Elizabeth Quigley). No refunds available after February 15, 2003. Visa, MasterCard, or Discover Credit Cards are accepted. In this case, the address supplied must be the billing address. Please supply also the following information.

Type of Card _____ Credit Card Number _____ Expiration Date _____

Cardholder's Name _____ Signature _____

Credit Card Billing Address _____



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