Schedule for Interface 2011

Wednesday, June 1, 2011

7:30 am – 5:00 pm	**Registration**	*Bldg. C Lobby*

8:00 am – 9:45 am

Welcoming and Keynote Address:

21st Century Analysis, Biomedical, Collaboration   *Auditorium*
and Determinism Dogma: Emerging Challenges and
Guidance for Interface of Computing and Statistics
Arnold Goodman, Collaborative Data Solutions

9:45 am – 10:15 am	**Morning Break**	*Prefunction Hall*

10:15 am – 12:00 noon   **Technical Sessions**

Statistical Analysis of Attributed Graphs and Networks.   *Room 1012*
Organizer: David Marchette, Naval Surface Warfare Center, Dahlgren Division
1. *Tweets to Hypergraphs*, Elizabeth Hohman, Naval Surface Warfare Center, Dahlgren Division
2. *Vertex Nomination: Finding Similar Vertices in Communications Graphs Attributed with Human Language*, Glen Coppersmith, Johns Hopkins University
3. *Combining Geographic Information in Random Dot Product Graphs*, David Marchette, Naval Surface Warfare Center, Dahlgren Division

Predictive Modeling. Organizer: Georgiy Bobashev,   *Room 1014*
Research Triangle Institute
1. *Using Random Forest Models to Predict Organizational Violence*, Burton Levine, Research Triangle Institute
2. *Patterns of Daily Alcohol Consumption*, Dan Liao, Research Triangle Institute
3. *Predictive Modeling Processes and Heavy Alcohol Use*, Barry Eggleston, Research Triangle Institute
4. *Using Tree-Based Prediction Models for Missing Data in the Complex Survey Setting*, Daryl Creel, Research Triangle Institute

12:00 noon – 1:30 pm	**Lunch Break**	*Bldg. C Café*

1:30 pm – 3:15 pm   **Technical Sessions**

    Case Studies in Visualization.   **Room 1012**
    Organizer: David W. Scott, Rice University
       1. *Response Surface Methodology*, John Sall, JMP/SAS Institute
       2. *Exact and Approximate Area-proportional Circular Venn and Euler Diagrams*, Leland Wilkinson, SYSTAT Software, Inc.
       3. *Two Micromap Extensions: 3-Way Hypothesis Test Conditioned Micromaps and More Options for Dynamic Comparative Micromaps*, Daniel Carr and Chunling Zhang, George Mason University

    Tree Based Machine Learning.   **Room 1014**
    Organizer: Adele Cutler, Utah State University
       1. *Random Forests Variable Selection*, Hemant Ishwaran, Cleveland Clinic
       2. *Finding Structural Variants in Individual Human Genomes with Random Forests*, Jacob Michaelson, Psychiatric Genomics - Sebat Group and University of California, San Diego
       3. *Probability Machines*, James D. Malley, Center for Information Technology, National Institutes of Health

3:15 pm – 3:45 pm   **Afternoon Break**   *Prefunction Hall*

3:45 pm – 5:30 pm   **Technical Sessions**

    A Few Challenges on the Road toward Robot-Assisted ISR.   **Room 1012**
    Organizer: Barry Bodt, Army Research Laboratory
       1. *Cross-country Autonomous Navigation: Trade-offs and Challenges*, Juan Pablo Gonzalez, General Dynamics Robotic Systems
       2. *Using Hybrid Maps to Understand Space and Promote Common Ground*, MaryAnne Fields and Jason Owens, U.S. Army Research Laboratory and Kostas Daniilidis, University of Pennsylvania
       3. *Similarity-Based Information Fusion*, Eric Heilman,Timothy P. Hanratty, U.S. Army Research Laboratory

    Reproducible Research.   **Room 1014**
    Organizer: Jürgen Symanzik, Utah State University
       1. *Approaches and Barriers to Reproducible Practices in Biostatistics*, Matt Shotwell, Vanderbilt University
       2. *Practical Implementation of Reproducible Research in the Madagascar Software Project*, Sergey Fomel, University of Texas
       3. *Archiving Computational Research in Virtual Machines*, Sorin Mitran, University of North Carolina

5:30 pm – 7:30 pm Happy Hour at Embassy Suites

6:00 pm – 8:00 pm   Board of Directors Meeting and Dinner

7:30 pm – 9:30 pm   Conference Mixer at Embassy Suites

Thursday, June 2, 2011

7:30 am – 5:00 pm   **Registration**   *Bldg. C Lobby*

8:00 am – 9:45 am   **Technical Sessions**

Three Approaches to Large p Inference.   *Room 1012*
Organizer: David Banks, Duke University
1. *Spatial Varying Coefficient Models for Neuroimaging Data*, Hongtu Zhu, University of North Carolina, Chapel Hill
2. *An Ordinary Differential Equation-Based Solution Path Algorithm*, Yichao Wu, North Carolina State University
3. *Cherry-Picking in Cluster Analysis and Regression*, David Banks, Duke University

Business Knowledge and Networks in SAS Data Mining.   *Room 1014*
Organizer: David Duling, SAS Institute
1. *Combining Knowledge-based and Statistical Approaches to Extract Sentiment from Text*, Russell Albright, SAS Institute
2. *GLM models for Insurance Rate Making*, Billie Anderson, SAS Institute
3. *Network Visualizations in Common Data Mining Analysis*, David Duling, SAS Institute

9:45 am – 10:15 am   **Morning Break**   *Prefunction Hall*

10:15 am – 12:00 noon   **Technical Sessions**

Visual Inference and Uncertainty.   *Room 1012*
Organizer: Roy Welsch, MIT
1. *Data Visualization by Navigating High Dimensional Space with Low Dimensional Trajectories*, Wayne Oldford, University of Waterloo (Canada)
2. *Visualizing the Variability of Plots*, Rajiv S. Menjoge, Google and Roy E. Welsch, MIT
3. *Visual Statistical Inference for Regression Parameters*, Mahbubul Majumder, Heike Hofmann, and Dianne Cook, Iowa State University

Statistical Issues in Weather and Climate Research.　　　　　　*Room 1014*
Organizer: Richard Smith, SAMSI and UNC, Chapel Hill
1. *Nonparametric Spatial Models for Extreme Temperature Data*,
   Montse Fuentes, North Carolina State University
2. *Space-time Modeling of Climatic Trends*, Peter Craigmile, Ohio State
   University
3. *The Reliability of Millennial Multi-proxy Temperature
   Reconstructions*, Blake McShane, Northwestern University

12:00 noon – 1:30 pm　　　　**Lunch Break**　　　　　　　　*Bldg. C Café*

1:30 pm – 3:15 pm　　　　**Technical Sessions**

Celebrating the 20ᵗʰ Anniversary of JCGS:　　　　　　*Room 1012*
Highlights at the Interface.
Organizer: Richard Levine, San Diego State University
1. *Cross-section and Longitudinal Penalized Functional Regression*,
   Jeff Goldsmith, Johns Hopkins University
2. *Dissimilarity Plots: A Visual Exploration Tool for Partitional
   Clustering*, Michael Hahsler, Southern Methodist University
3. *Counting Contingency Tables via Multistage Markov Chain Monte
   Carlo*, George Fishman, University of North Carolina, Chapel Hill.

Maps, Nets, Optimization and Profiling:　　　　　　*Room 1014*
Data Visualization, Modeling and Interpretation in JMP.
Organizer: Bradley Jones, JMP/SAS Institute
1. *Using Maps as a Background for Displaying Information that is
   Geographically Distributed*, Xan Gregg, JMP
2. *Neural Nets – Boosted and Cross-Validated*, Christopher Gotwalt,
   JMP
3. *Interactive Graphics for Exploring Multi-Dimensional and
   Multivariate Functions*, Bradley Jones, JMP

3:15 pm – 3:45 pm　　　　**Afternoon Break**　　　　　　*Prefunction Hall*

3:45 pm – 5:30 pm　　　　**Technical Sessions**

Algorithms for Data and Information Visualization.　　　　*Room 1012*
Organizer: Adalbert Wilhelm, Jacobs University, Germany
1. *3-d Stereoscopic Plots: From History to R*, Juergen Symanzik, Utah
   State University
2. *Interactive Visualization of Multiple Time Series,* Anushka Anand,
   National Center for Data Mining, University of Illinois at Chicago
3. *Singular Spectrum Analysis Algorithm for Decomposing and
   Visualizing Time Series Data*, Michael Leonard, SAS Institute Inc.

Statistics of Function and Shape.   Room 1014
Organizer: Michael Schimek, Medical University of Graz, Austria
    1. *Functional Varying Coefficient Models*, Damla Senturk, UCLA
    2. *Smoothing Dynamic Positron Emission Tomography Time Courses Using Functional Principal Components*, Ci-Ren Jiang – UC Davis
    3. Detection of Functional Abnormalities in Brain Using Shape Analysis of Subcortical Structures, Sebastian Kurtek, Eric Klassen, Florida State University, Zhaohua Ding, Malcolm J. Avison, Vanderbilt University, Anuj Srivastava, Florida State University

Computing and Statistics.   Auditorium
Organizer: Edward Wegman, George Mason University
    1. *Finite User Pool Effect in Two Sample t-test of Controlled Experiments on the Web* (refereed), Shaojie Deng, Microsoft
    2. *Visualizing Association Rules in Hierarchical Groups* (refereed), Michael Hahsler and Sudheer Chelluboina, Souther Methodist University
    3. The Architecture of Rc2, E. James Harner and Mark Lilback, West Virginia University

  5:30 pm – 7:30 pm   **Happy Hour at Embassy Suites**

  7:00 pm – 9:00 pm   **Conference Banquet at Embassy Suites**

Friday, June 3, 2010

  7:30 am – 9:00 am   **Registration**   *Bldg. C Lobby*

  8:00 am – 9:45 am   **Technical Sessions**

Business Analytics and Algorithms in Data Mining.   Room 1012
Organizer: Simon Sheather. Texas A & M University
    1. *Computing for Robust Process Engineering*, John Sall, Bradley Jones and Christopher Gotwalt, JMP/SAS Institute
    2. *Two Entities and Beyond: Challenges and Examples in Social Network Analysis*, Jin-Whan Jung, Dominic Jann, Dan Kelly and John Brocklebank, SAS Institute
    3. *Choosing between Logistic Regression and Classification Trees in Data Mining*, Mike Speed and Simon Sheather, Texas A&M University

Best of Statistical Analysis and Data Mining.　　　　　*Room 1014*
Organizer: Joe Verducci, Ohio State University
1. *Symbolic Data Analysis and Statistical Analysis and Data Mining,*
    Lynne Billard, University of Georgia
2. *Learning Representations of Language for Greater Generalization*
    Capacity, Alexander Yates, Temple University
3. *Coupling Optional Polya Trees – A Bayesian Nonparametric*
    Approach to Case-Control Studies, Li Ma, Stanford University

9:45 am – 10:15 am　　　　**Morning Break**　　　　　　　*Prefunction Hall*

10:15 am – 12:00 noon　　　**Technical Sessions**

Best of Wiley Interdisciplinary Reviews:　　　　*Room 1012*
Computational Statistics.
Organizer: Yasmin Said, George Mason University
1. *Streaming Data,* William F. Szewczyk, NSA
2. *Record Linkage,* William E. Winkler, Census Bureau
3. *Some Interdisciplinary Topics on: i) Game-Theoretical Solutions for*
    Quantitative Cyber-Risk Estimation/ Management ii) CLOUD
    Computing Implementations to Compute Operational Risk using
    Java Programming, Mehmet Sahinoglu, Auburn University

Data Mining Social Data.　　　　　　　　　　　*Room 1014*
Organizer: Rida E. A. Moustafa, dMining Technology
1. *Analysis on Racial Rates and the Effective Elements of Home*
    Mortgage Lending Acceptance in California, Chong Zhang, George
    Washington University
2. *Predicting and Explaining Potential Caravan Insurance Policy*
    Ownership, Haiyun Zheng, George Washington University
3. *Red Zone, Blue Zone: Discovering Parking Ticket Trends in New*
    York City, Samuel S. Ackerman, George Washington University
4. *Clustering TB Microarray Data for Potential Pathway Discovery and*
    Disease Discrimination, Laura Tipton, George Washington
    University

BUILDING C - FIRST FLOOR

BREAKOUT ROOM 1014

BREAKOUT ROOM 1012

BREAKOUT ROOM 1010

BRIEFING ROOM 1009

BRIEFING ROOM 1008

BRIEFING ROOM 1007

BRIEFING ROOM 1006

BRIEFING ROOM 1005

BRIEFING ROOM 1004

PREFUNCTION HALL 1003

BUSINESS CENTER

STAIR 5 1016

STAIR 4

DN

GALLERY 1017

COMM 1015A

LOBBY 1018

ELEC 1015B

STOR 1018C

HSKPG 1018D

PROJECTION 1033

STOR 1034B

TOLET 1034C

GREEN RM 1034

MEN 1020

VESTIBULE 1021

MECH CHASE

STORAGE 1040

CONTROL 1041

CONTROL 1042

STORAGE 1043

VESTIBULE 1044

AUDITORIUM 1052

ADA

ADA

VESTIBULE 1051

WOMEN 1050

GALLERY 1019

PORTE COCHERE

WORK/COPY 1061

MEETING 1063

MEETING 1065

PROJECTION 1053

GREEN RM 1054

TOLET 1054A

CORR 1060

UP

OFFICE 1062

OFFICE 1064

OFFICE 1066

OFFICE 1068

OFFICE 1070

OFFICE 1072

LUGGAGE 1074

GREETING STATION

CUSTOMER CHECK-IN STATIONS

LOBBY 1001

VESTIBULE 1000

BUILDING RECEPTION

CE