Washington Statistical Society

CHAPTER • AMERICAN STATISTICAL ASSOCIATION

WSS Newsletter-December 1983

CALENDAR

TOPIC: Nonparametric Multiple Comparisons: The State of the Art
SPEAKER: Dr. G. Campbell, DCRT, NIH
DATE AND TIME: Thursday, December 1, 1983; 12:00-2:00 p.m.
LOCATION: Room E, Landow Building, 7910 Woodmont Ave., Bethesda, Maryland
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TOPIC: Modeling Bivariate Data
SPEAKER: Ingram Olkin, Stanford University & National Bureau of Standards
DATE AND TIME: Friday, December 2, 1983; 12:30-2:00 p.m.
LOCATION: Rooms 413-414, George Washington University Marvin Center,
800-21st Street, N.W., Washington, D.C.
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TOPIC: Nonparametric Procedures for Comparing Diagnostic Tests with
Paired or Unpaired Data
SPEAKER: Dr. Sam Wieand
DATE AND TIME: Thursday, December 8, 1983, 11:00-12:30 p.m.
LOCATION: Landow Building, Conf. Room E, 7910 Woodmont Ave., Bethesda, Md.
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TOPIC: Bayesian Data Analysis
SPEAKER: Henry Braun, Educational Testing Service
CHAIR: Joseph Gastwirth, George Washington University
DISCUSSANTS: Nozer Singpurwalla, GWU and Dr. Cliff Spiegelman, NBS
DATE AND TIME: Tuesday, December 13, 1983; 12:00-1:30 p.m.
LOCATION: Rm. 208, George Washington University, Bldg. C, 2201 G St., N.W.
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TOPIC: Birthday/Holiday Program for Morris Hansen
DATE AND TIME: Thursday, December 15, 1983; 5:30-8 ish
LOCATION: GWU Faculty Club, 21st Street, N.W., between H and I
SEE GREEN FLYER FOR DETAILS
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TOPIC: 1982 Economic and Agricultural Census Automation
and Other Improvements
SPEAKER: Michael G. Farrell, Census
DISCUSSANTS: Daniel Rosa, IRS and David Morganstein, WESTAT
DATE AND TIME: Thursday, December 15, 1983; 12:30-2:00 p.m.
LOCATION: Room 4E-069, Forrestal Bldg., 1000 Independence Avenue, S.W.
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SPONSOR: National Center for Health Statistics

TOPIC: Coping With Collinearities Using Prior Estimates of
Regression Coefficients
SPEAKER: Nathan Mantel, American University
DATE AND TIME: Thursday, December 15, 1983; 1:30-2:30 p.m.
LOCATION: Room 1-23, Center Bldg., 3700 East West Highway, Hyattsville, Md.

TOPIC: Nonparametric Multiple Comparisons: The State of the Art
ABSTRACT: The area of multiple comparisons is explored in the context of
           the special problems that nonparametric statistics introduce.
           Particular attention is focussed on stepwise procedures in the
           one-way layout. Control of the various types of errors as well
           as power comparisons are investigated for a variety of non-
           parametric procedures using Monte Carlo simulations.
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TOPIC: Modeling Bivariate Data
ABSTRACT: Regardless of the criterion used, the standard multivariate dist-
           ribution is the natural extension of the univariate normal dist-
           ribution. However, this is not the case for non-normal distribu-
           tions. The talk surveys the methods for generating bivariate
           distributions with given marginals. Some new results using the
           bivariate binomial, Poisson, and Gamma distributions will be men-
           tioned.
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TOPIC: Nonparametric Procedures for Comparing Diagnostic
           Tests with Paired or Unpaired Data
ABSTRACT: Nonparametric methods will be presented for comparing two diag-
           nostic tests designed to distinguish "cases" from "controls".
           Procedures have been developed for paired or unpaired data from
           continuous or discrete diagnostic assays. The nonparametric
           statistics, which are related to the "receiver operating charac-
           teristic" curve, are robust and generally efficient. Guidelines
           will be given indicating what hypothesis each statistic is de-
           signed to test and how large samples must be for the asymptotic
           theory to hold.
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TOPIC: Bayesian Data Analysis
ABSTRACT: The rationale for the (empirical) Bayesian analysis of large data
           sets will be examined and the development of a flexible family of
           empirical Bayes models outlined. The utility of these techniques
           will be illustrated through their application to problems involv-
           ing the simultaneous estimation of large numbers of statistical
           relations (either multiple regression equations or survival
           curves) when comparatively little data is available for the esti-
           mation of any single relation.
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TOPIC: 1982 Economic and Agriculture Censuses: Automation and
           Other Improvements
ABSTRACT: In 1982, the economic and agriculture censuses were conducted
           concurrently for the first time. Innovative concepts in complex
           software systems, data processing, survey and questionnaire
           design, and publication procedures resulted in dramatic improve-
           ments in this program.
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TOPIC: Coping with Collinearities Using Prior Estimates
           of Regression Coefficients
ABSTRACT: In certain circumstances, estimates of parital regression coeffi-
           icients yielded by least squares analysis of multivariate data
           can be unreliable. If prior estimates of judgemental values of
           the coefficients are available, they can be used to obtain
           estimates not subject to such unreliability. These are obtained
           by estimating each regression coefficient separately as though
           the preliminary values of all the remaining coefficients
           were correct.
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Deadline for inserting notices
is the first of the month pre-
ceding the publication date.

Send notices and requests to:
Evelyn R. Kay
520 - 22nd Street, N. W.
Washington, D. C. 20037 (202) 331-1153

JOB OPENINGS

**Operations Research/
Mathematical Statistician** Excellent opportunity for professional growth with a small, high-quality internal consulting group in the CIA. Position involves the development of advanced operations research/statistical techniques and their application to a wide variety of intelligence problems--military, economic, political, scientific/technical. Applicants should be kowledgeable in sampling theory, econometric techniques, non-linear and integer optimization techniques and "impressionistic" multivariate techniques. Projects involve research at the state-of-the-art. Candidates should be US citizens, have a Ph.D in operations research, statistics, or related field (undergraduate degree in engineering a plus), zero to ten years experience, a working knowledge of at least one high-level computer language and the ability to present ideas well in oral and written form for both technical and non-technical clients. Some travel required. Salary range $29,000-$40,000 commensurate with training and experience. Forward resume, graduate transcript, and samples of writing to: Personnel Representative, Department A, Room 821 (LQ), P. O. Box 1925, Washington, D. C. 20013.

**Mathematical Statistician
GS-9/11** Incumbent performs statistical analysis including sampling theory and estimation procedures on a broad range of problem definitions and develops and executes mathematical statistical studies for solution of problem areas investigated. Knowledge of sampling and survey methods required; computer programming and software packages highly desired. Applicants should contact Andrew P. Klugh (202) 632-4804, Work Force Analysis and Statistics Division, Compliance and Investigations Group, Office of Personnel Management, Washington, D. C. 20415

**Risk Assessment Specialist.
Biostatistician GS 1530-13.** Salary range $34,930-$45,406. Join statistical group supporting Toxicology Branch, Office of Pesticide Programs, Hazard Evaluation Division, for evaluation of carcinogenicity, mutagenicity, and/or reproductive hazards reported in toxicological studies with emphasis on the QUANTITATIVE ASSESSMENT OF IMPLIED RISK TO HUMANS. Announcement # EPA 3-OPP-208. Current Federal employment not required, Closing 12/31/83. Send 171 to Lucy Tanner, PM 226, Room 3020, Office of Personnel, EPA, 401 M Street, S. W., Washington, D. C. 20460.

**Mathematical Statisticians
GS-9/13** The Division of Survey Techniques, Bureau of Labor Statistics, has openings for several mathematical statisticians with strong academic and empirical backgrounds in survey design. The positions involve directing activities in selecting samples, non-response adjustment, variances and developing survey methodology for BLS's local area and national Occupational Wage Survey Programs such as the Industrial Wage Survey. Qualifications should include extensive knowledge of complex sample survey design and estimation techniques. Knowledge and experience in use of computer software packages such as SAS is desirable. Send SF-171 to Stephen Cohen, Bureau of Labor Statistics, Division of Survey Techniques, 441 G Street, N.W., Room 2021, Washington, D. C. 20212. Phone (202) 523-1874 or 523-1099.

**Mathematical Statistician
GS-1529-13 (2 positions)** The Agriculture Division of the Bureau of the Census anticipates the announcement and closing of two mathematical statistician positions by mid-December. Both positions require strong technical capabilities in the areas of survey design and estimation, computer analysis and management of large data bases, and research and publication. One position will concentrate on sample selection, weighting, and reliability estimation while the other position will focus on quality control, evaluation of surveys, edit and imputation procedures, and mail list development. Both positions will require supervising a small staff. Interested applicants should immediately contact Dr. Charles P. Pautler, Assistant Chief for Research and Methodology, (301) 763-5943 for further details.

Deadline for inserting notices
is the 1st of the month preced-
ing the publication date

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<div style="text-align:right">(mailed 11/25/83)</div>

JOB APPLICANTS

Listed below is a brief description of the qualifications of applicants seeking
employment. Employers interested in interviewing these applicants should notify
Mrs. Kay of their interest by CODE NUMBER. The request should be by mail and
should include the employer's name, organization, and telephone number. The
applicant will be notified of the employer's interest and initiation of any fur-
ther contact will be left to the applicant. All contacts will be confidential.

CODE NUMBER: 83-11-01
Position wanted: Mathematical Statistician GS 1529-12/13 in Washington, D.C.
                  area.
Education: Masters Degree, George Washington University, 1981
Experience: 15 years Federal Government: (physical) systems reliability;
acceptance sampling and quality control; large-scale computerized database
reports; precise time and time interval.
Objective: Applied math/stat in R&D environment.
Area of Interest: Multivariate analysis and multiple time series analysis.

CODE NUMBER: 83-11-02
Position wanted: Statistician GS 12/13 or equivalent in private industry in
                  Washington, D.C. area.
Education: MS applied statistics, 3-1/2 years experience as mathematical
                  statistician.
Experience: Involvement in all phases from project design to final report.
Background in General Linear Models, regression, ANOVA, multivariate analysis,
non-parametrics, questionnaire design. Experience with Fortran and major
statistical packages.
Area of interest: Modeling and multivariate analysis.
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AMERICAN STATISTICAL ASSOCIATION

806 Fifteenth Street, N. W.,   Washington, D. C. 20005