



American Statistical Association

SAN FRANCISCO BAY AREA CHAPTER

CALENDAR OF FUTURE TALKS

General Applications Programs:

DECEMBER 1, 1988 THURSDAY Prof. Robert Shumway, UC Davis
JANUARY 19, 1989 THURSDAY Mark DiCamillo, Field Research

JOINT GENERAL APPLICATIONS AND BIostatISTICS

SPEAKER: Professor Robert Shumway
UC Davis

TOPIC: "ESTIMATING MEANS IN CENSORED SAMPLES UNDER TRANSFORMATION"

Reporting procedures for potentially toxic pollutants are complicated by the fact that concentrations are measured using small samples that include a number of observations lying below some detection limit. Furthermore there are often a small number of high concentrations observed in combination with a substantial number of low concentrations. The above configuration produces small non-normally distributed samples with censoring.

This talk proposes a procedure for computing improved estimators for the means of censored samples that can be transformed to normality. The method estimates the optimal power transformation in the Box-Cox family by searching the censored data likelihood. Maximum likelihood estimators for the mean of the transformed scale are calculated via the EM algorithm. Maximum likelihood estimators in the original scale are computed as functions of the estimated mean and variance in the transformed population. Confidence intervals are computed using the delta method and the nonparametric percentile and bias-corrected percentile versions of Efron's bootstrap.

A simulation study over sampling configurations expected with environmental data indicates that the delta method combined with a reliable value for the power transformation produces intervals with better coverage properties than are yielded by the bootstrap.

DATE: December 1, 1988 (Thursday)
3:30 - 4:00 Coffee
4:00 - 5:00 Presentation

PLACE: Room 400
Golden Gate University
536 Mission Street
San Francisco, CA

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Curtis Engelhard
(408) 765-9325

APPLICANT:

POSITION DESIRED: Mathematical Statistician

EXPERIENCE: Ten years (last four as a manager) at the U.S. Census Bureau. Experience in survey design, estimation procedures, technical report writing, oral presentations, methods for data collection, processing, and statistical analysis. Familiar with FORTRAN programming and statistical packages (SPSS, Minitab, SAS and BMDP). Versed in Deming's management philosophy.

EDUCATION: M.A. in Applied Math/Statistics, U.C. Santa Barbara, 1978

CONTACT: Robert Edson (703) 971-0245 after 3pm (Pacific)

EMPLOYMENT OPPORTUNITIES

1. **STATISTICIAN**, FAILURE ANALYSIS ASSOCIATES

RESPONSIBILITIES: Use methods of statistical epidemiology in the analysis of large volumes of accident data. Coordinate and manage tasks performed by research assistants.

REQUIREMENTS: M.A. or Ph.D in statistics or related field. Experience with analysis of large volume databases. SAS or other statistical analysis packages is essential. Engineering background is an advantage.

COMPANY: Failure Analysis Associates is a national engineering and scientific services firm specializing in the analysis and prevention of engineering system and product failures.

SEND RESUME: Personnel Manager, Failure Analysis Associates, P.O. Box 51470, Palo Alto, CA 94303. Reference AD# RR 9.23.
Equal Opportunity Employer.

2. **SR STATISTICIAN**, Systems Applications Inc.

RESPONSIBILITIES: Perform exploratory and confirmatory data analyses in support of the U.S. Environmental Protection Agency. Analyses require originality and ingenuity; there is much opportunity for professional growth. May participate in marketing activities.

REQUIREMENTS: PhD in statistics or equivalent with at least one year of statistical consulting experience. Ability to program in FORTRAN, SAS, Minitab, BMDP, or other statistical packages. Must have been able to present results clearly to clients.

SEND RESUME: JOB #4-P 89, Systems Applications Inc., 101 Lucas Valley Road, San Rafael, CA 94903. Please indicate salary expectations and referral source.

EMPLOYMENT OPPORTUNITIES (CONTINUED):

3. STATISTICIAN, UCSF, Dept of Epidemiology & Internal. Health

RESPONSIBILITIES: Conduct statistical analysis national health surveys using multivariate and weighted analyses with prewritten statistical programs. Adapt or modify computer programs for use in analyzing survey data. Create, document and maintain computer data files. Advise senior staff on data processing options.

REQUIREMENTS: MA or equivalent in Biostatistics. Strong SAS or SPSSX. Experience with survey research and complex sample survey design desirable. Interest and capability to conduct analyses of a large national data set employing a complex sampling design is required.

SEND RESUME: John Neuhaus or Maradee Davis, Dept. of Epidemiology and Intl. Health, UCSF, San Francisco, CA 94143-0560.
Phone (415) 476-2528.

4. BIOANALYST, Syntex, Palo Alto

RESPONSIBILITIES: Analyze data from clinical trials. Understand and interpret statistical analyses, generate summary tables and graphs for presentation.

REQUIREMENTS: MA in Statistics or Biostatistics. Three years experience in data analysis and computer programming. SAS programming and strong microcomputer skills.

SEND RESUME: Carol A. Francisco, 3401 Hillview Avenue, Palo Alto, CA 94304.
Phone (415) 354-7141.

CHAPTER NEWS: Barbara Kamm has been elected District Governor, District 7 for the ASA Council of Chapters. Barbara previously served as the SF Bay chapter representative to the Council of Chapters; she will serve a two year term, 1989-1990, as Council Governor.

CHAPTER DUES: Several members are more than a year behind in local chapter dues. Please check the date on your mailing label. The printed date is the last time that we received your dues. If you are overdue please send \$6 to:

Anna Bagniewska
Syntex Labs
3402 Hillview Avenue A4-200
Palo Alto, CA 94303

ANNOUNCEMENTS:

Stanford Students Invite You to Lunch: Participate in STATS.

The students at the Statistics Department of Stanford University have a new program "Statisticians Together to Augment Training at Stanford" of STATS. The program consists of a series of informal luncheons with several students meeting a corporate statistician. The purpose of STATS is to supplement the theoretical training that the students receive with a practical sense of how statistics are used in the real world. We basically just want to know what it is that statisticians do for different corporations. We are looking for non academic statisticians to take part in the program. You will be able to choose the time, date, location and number of students ~~that~~ you would like to meet.

CONTACT: Vance Berger, Director STATS, Dept. of Statistics, Sequoia Hall, Stanford, CA 94305. Phone (415)723-2213. or vance@playfair.stanford.edu.

NOTICE MAILED 11/15/88

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