The American Statistical Association
San Francisco Bay Area Chapter
Since 1928

November, 1996

Joint Biostatistics and General Applications Program

"The Holistic Profit Scan - A Better Way to Measure Score Performance?"

Bruce Hoadley

Fair Isaac, San Rafael, CA

In many applications of classification scoring, analysts measure the performance of a score statistically. Some common measures are divergence, KS (Kolmogorov - Smirnoff), and the trade-off gap (sometimes called the receiver operating characteristic (ROC), or the Lorenz diagram). Statistical measures can be useful, but they do not answer the fundamental question: how much more money will I make if I use the proposed score? We start with the traditional binary classification model, where an accepted Good yields a profit and an accepted Bad yields a loss. We then define a relative profit measure called holistic profit (HOP), which is profit expressed as a percentage of profit under perfect classification. From this, two new measures are defined. The first is the HOP curve, which generalizes the trade-off gap. The second is the HOP scan, which summarizes the HOP curves, and generalizes the KS statistic.

This is joint work with Professor Robert M. Oliver.

Date: Thursday, November 7, 1996

Time: 3:30 - 4:00 PM   Refreshments
4:00 - 5:00 PM   Talk

Place: Room 1011 Evans Hall, U.C. Berkeley, Berkeley CA

Dinner: 6:00 PM at Saysetha (Thai food), 6230 Telegraph Ave., Berkeley

Directions: See the other side of this page for a map of the UC Berkeley Campus. Parking is available at public lots and meters. Two-hour free parking is available but scarce in the neighborhoods near campus. Campus parking garages require $3.50 (quarters only).

OPEN POSITIONS:

STATISTICIAN, UCSF

The Osteoporosis Research Group (Department of Radiology, Skeletal Section) of the University of California, San Francisco is seeking a highly self-motivated individual with an advanced degree (MA/MS) in Biostatistics, Statistics, Epidemiology, Public Health, or a related field to collaborate in a pivotal capacity on multiple, parallel, ongoing quality assurance projects exploring the effects of drug treatment and prophylaxis on bone mass and the occurrence of fracture.

Projects will comprise analysis of diagnostic radiographic data collected at hundreds of bone densitometry clinics worldwide under the auspices of discrete multi-center drug trials. The incumbent will be principally responsible for the statistical analysis of quality assurance data generated from these trials, providing statistical and programming support to doctoral-level biostatisticians, writing and running SAS programs, creating reports from SAS outputs, and interpreting the results. Research opportunities with possibilities of publication may present themselves.

Required skills, knowledge & abilities:

1. Advanced degree as described above or BA/BS with two years experience.
2. Experience in clinical pharmaceutical trials desirable; experience with diagnostic radiology techniques and/or osteoporosis highly desirable.
3. Advanced understanding of statistics and mathematics, including generalized linear models, statistical processing control charts, and analysis of
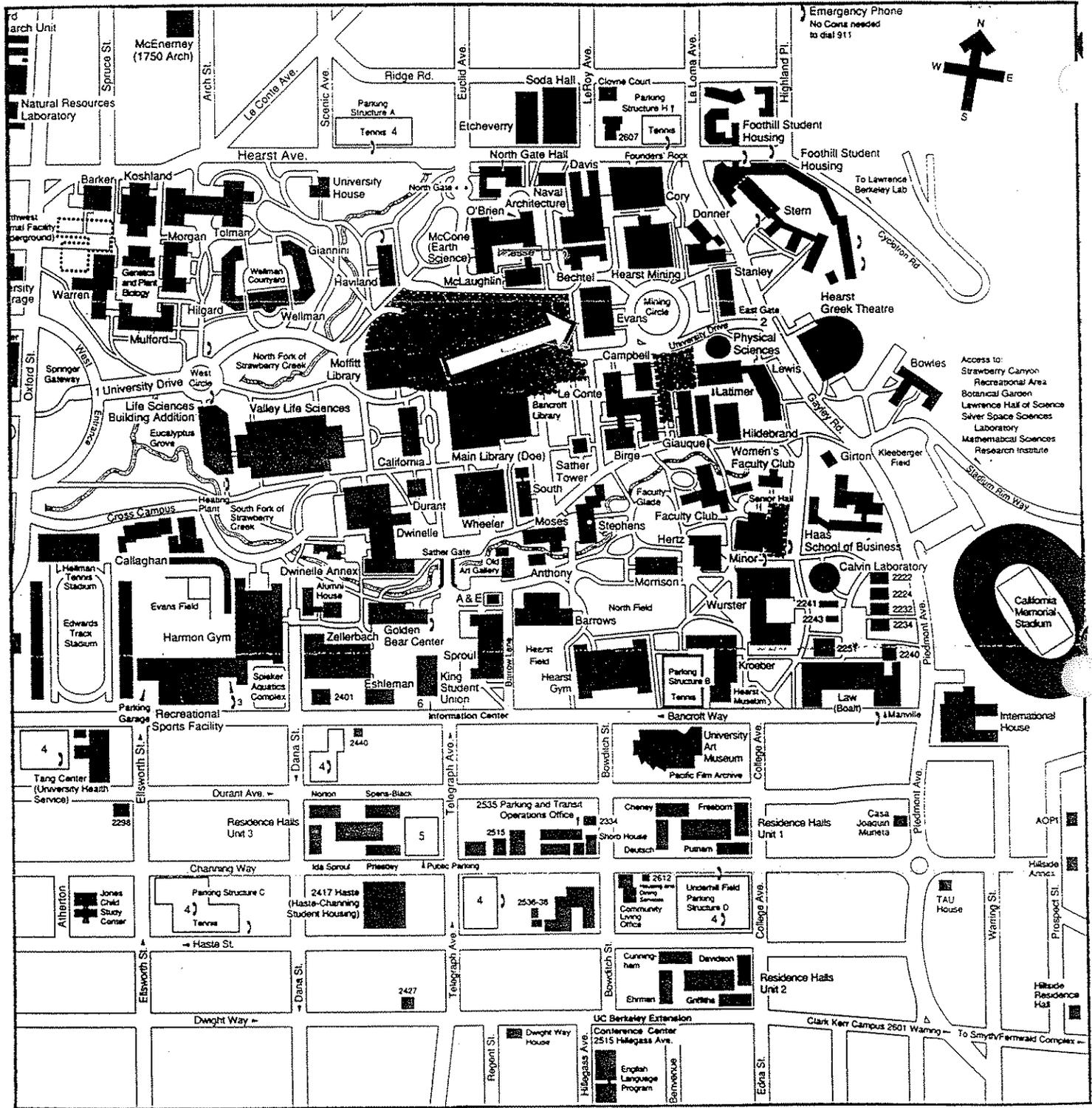
From I 80 in Berkeley, take University Avenue east until it ends at the west gate of the campus. Evans Hall, on the east side of the campus, is marked with an arrow in the map above. Limited free and metered parking is available on the residential streets (LeRoy Ave., La Loma Ave., Ridge Rd. and Highland Pl.) north of the campus. Additional metered parking can be found along Hearst and Oxford Avenues. Additionally, the City of Berkeley operates a meter parking lot at Hearst and Alston, and a parking garage at 2025 Center St. Free campus shuttle buses stop at Evans Hall and numerous other locations around the campus including across from the Berkeley BART station on Shattuck Ave.

measurement error models. Expert in using statistical packages and a thorough knowledge of SAS programming including SAS Macros and Graph. Knowledge of S plus is also preferred;
4. Flexibility and aptitude for keeping a number of projects moving forward simultaneously;
5. Computer literacy in both data processing and text processing, and familiarity with Macintosh and P.C. based software packages; experience with VAX/VMS DOS, Macintosh, UNIX and operating systems very important.

Interested parties should send resumes to ying_lu@radmac1.ucsf.edu, or fax to (415) 502-8091.

Statistician, LifeScan (a Johnson & Johnson Co.)

As part of the LifeScan team, your knowledge and skills will bring special rewards. Not only will you be instrumental in helping to develop innovative ways to manage diabetes, your work will improve the quality of people's lives. Our continued growth directly reflects how well we satisfy our customers and provides us with the resources for further technological breakthroughs. Combining technology and concern for simple human needs is the source of LifeScan's extraordinary success, and it can by yours, too.

In this fast-paced environment, you'll assist departments with in LifeScan to design protocols, analyze data, and present results. Utilizing appropriate statistical and analytical techniques, your problem-solving skills will be necessary to assist management in making critical decisions.

You will need an MS or Ph.D. in Statistics, or equivalent, with a minimum of 3 years' experience in an industrial or pharmaceutical environment. You will need experience in design and review of test protocols, validation, analysis of clinical data, design of experiments and

SPC. You must be proficient in SAS, as well as be an experienced project leader. You must be a proven team player and possess strong interpersonal and communication skills. Your knowledge of FDA requirements of medical devices is desirable.

If interested, please send your resume to:
LifeScan
1000 Gibraltar Dr.
Milpitas CA 95035
Attn: HR Source code: ASAN96PM

You may also call our toll-free job hotline number:
1-888-455-5627
(1-888-455-JOBS)

Evolutionary/ecological Statistician
San Francisco State University

The Department of Biology at San Francisco State University invites applications for a tenure track position at the level of ASSISTANT PROFESSOR. Candidates must have a Ph.D., postdoctoral experience, and a proven record of research achievement and teaching excellence. The successful applicant will be encouraged and supported to develop an extramurally funded research program.

We are seeking a candidate with a broad understanding of statistical theory and or evolutionary biology. Responsibilities

statistics applied to any area of ecology methods, and a research record in will also include teaching undergraduate and graduate courses in biometry, participating in the biology curriculum and consulting with graduate students and faculty on statistical issues. Applicants should submit (to the Chair of the appropriate committee) a curriculum vitae, statements of research and teaching interests, copies of relevant publications and three letters of recommendation to:

Chair,
Ecological/Evolutionary
Statistician Search Committee
Department of Biology
San Francisco State University
1600 Holloway Ave
San Francisco, CA 94132

Application materials must be received by December 14, 1996. The position is pending approval. San Francisco State is an equal opportunity employer; women and minorities are encouraged to apply.

Submissions to the SF ASA Chapter Newsletter

Please send your submissions to Ann Kalinowski, Failure Analysis Associates, 149 Commonwealth Drive, Menlo Park, CA 94025. Phone:(415)688-7203, Fax:(415)328-2988,e-mail:sfamk@fail.com.

San Francisco Bay Area Chapter

American Statistical Association

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21 OCT
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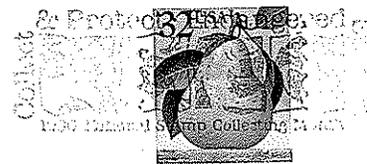
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