## Haitao Yuan

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RESEARCH INTERESTS Bayesian statistics, spatial statistics, nonparametric regression, statistical methods for large datasets, statistics for public policy

EDUCATION

## Carnegie Mellon University, Pittsburgh, Pennsylvania USA

Ph.D. Candidate, Statistics, December 2001 (expected graduation date: May 2003)

- Dissertation Topic: "Nonstationary Covariance Models for Spatial Data and Regression Problems"
- Advisor: Mark J. Schervish
  M.S., Statistics, May 2000

Duke University, Durham, North Carolina USA

M.S., Botany (Ecology), May, 1998

Carleton College, Northfield, Minnesota USA

B.A., Biology, May, 1993

Honors and Awards National Science Foundation Graduate Research Fellowship, 1996

Carleton College: graduated Magna Cum Laude, Honors in Biology, Phi Beta Kappa, 1993

ACADEMIC EXPERIENCE

## Carnegie Mellon University, Pittsburgh, Pennsylvania USA

Graduate Student

August, 1998 - present

Includes current Ph.D. research, Ph.D. and Masters level coursework and research/consulting projects.

Instructor May - June, 2002

Co-taught graduate level course for the Master of Science in Computational Finance program. Shared responsibility for lectures, exams, homework assignments, and grades.

• 46-731 Probability and Statistics, Summer 2002.

NSF VIGRE Teaching Fellow

January - May, 2001

Head teaching assistant. Duties included shared administrative responsibilities with faculty instructor, fielding of all student inquiries, and oversight of graduate student teaching assistants and graders.

• 36-217 Probability Theory and Random Processes, Spring 2001.

Teaching Assistant

August, 2001 - present

Duties at various times have included office hours and leading weekly computer lab exercises.

Publications

Paciorek, C.J., J.S. Risbey, V. Ventura, and R.D.Rosen. 2002. Multiple indices of Northern Hemisphere Cyclone Activity, Winters 1949-1999. Journal of Climate 15:1573-1590.

Paciorek, C.J., R. Condit, S.P. Hubbell, and R.B. Foster. 2000. The demographics of resprouting in tree and shrub species of a moist tropical forest. Journal of Ecology 88:765-777.

Paciorek, C.J., B.R. Moyer, R.A. Levin, and S.L. Halpern. 1995. Pollen consumption by humming-bird flower mite *Proctolaelaps kirmsei* and possible fitness effects on *Hamelia patens*. Biotropica 27:258-262. (author order determined by lot)

# Papers in Preparation

Ventura, V., C.J. Paciorek, and J.S. Risbey. Controlling the proportion of falsely-rejected hypotheses when conducting multiple tests with geophysical data.

Ickes, K., C.J. Paciorek, and S. Thomas. Effects of wild pigs on forest demographic processes in Malaysia.

## Conference Presentations

Paciorek, C.J., J.S. Risbey, V. Ventura, and R.D.Rosen. 2001. Changes in Northern Hemisphere winter storm activity (1949-1999) based on a comparison of cyclone indices. 8th International Meeting on Statistical Climatology, Luneberg, Germany, March, 2001.

Paciorek, C.J. and R. Rosenfeld. 2000. Minimum classification error training in exponential language models. 2000 Spring Transcription Workshop, College Park, Maryland.

http://www.nist.gov/speech/publications/tw00/html/abstract.htm#cp1-50

#### Professional Experience

Bureau of Transportation Statistics, U.S. Department of Transportation, Washington, District of Columbia USA

 $Summer\ researcher$ 

May, 2000 - August, 2000

Carried out several consulting projects, including modelling of injuries to cadavers in crash test experiments, analysis of airline delay data, and advice on analysis of airline economics data.

#### Abt Associates, Bethesda, Maryland USA

Associate Programmer Analyst and Research Assistant October, 1994 - August, 1996 Researcher and computer model developer for U.S. EPA Regulatory Impact Analysis of Section 403 Lead Paint Hazard Rule. Other projects included database analysis, literature reviews, and cost-benefit analysis.

#### Computer Skills

- Statistical Packages: R, S-Plus, BUGS; some experience with SAS; extensive use of C and Fortran statistical libraries.
- Languages: C++, Perl, Pascal, some use of Unix shell scripts, MPI parallel processing library.
- Applications: Generic Mapping Tools (GMT) Unix mapping software, LATEX, common Windows database, spreadsheet, and presentation software
- Algorithms: Experience programming Markov Chain Monte Carlo simulations of Bayesian posterior distributions
- Operating Systems: Unix/Linux, Windows.