

# SAI OKABAYASHI

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## Education

2005 - Present

**UNIVERSITY OF MINNESOTA, MINNEAPOLIS**

**Minneapolis, MN**

**Ph.D. in Statistics expected May 2011.** Thesis: "Parameter Estimation in Social Network Models".

Advisor: Charles J. Geyer.

- 2011 Best Dissertation Award nominee from Statistics department.
- Okabayashi, S. and Geyer, C.J. "Long Range Search for Maximum Likelihood in Exponential Families". Revised and resubmitted to *Electronic Journal of Statistics*. Presented at 2010 Modeling & Computation for Social Networks in Whistler, B.C., 2009 Midwest Statistics Research Colloquium at University of Chicago, and 2009 Joint Statistical Meetings in Washington, D.C.
- Okabayashi, S., Johnson, L., and Geyer, C.J. (2011). "Extending Pseudo-likelihood for Potts Models". *Statistica Sinica*, 21 331-347.
- Appointed by Statistics department to organize and run Student-Sponsored Seminar in April 2010.

1995 - 1999

**HARVARD UNIVERSITY**

**Cambridge, MA**

**B.A. with Honors in Applied Mathematics and Economics.** Harvard College Scholarships, 1995 - 1999.

## Experience

2005 - Present

**UNIVERSITY OF MINNESOTA, MINNEAPOLIS**

**Minneapolis, MN**

**Instructor, Theory of Statistics I & II (STAT4101, STAT4102)**

- Taught full-year statistical theory class to economics and statistics majors pursuing B.S. degrees.
- Devised curriculum, wrote lectures, managed teaching assistant, and assigned grades.
- Median scores of 6.0/6.0 in student evaluations on preparedness, clearness of presentation, helpfulness of feedback, respect towards students, and students' claim for deeper understanding of subject matter.
- Enrollment in course increased to 75 students for 2010 from 65 in 2009 and 35 in all previous years.

2007 - 2008

**Consultant, Statistical Consulting Clinic**

- Helped 80 graduate students, staff, and faculty with statistical issues at all stages of research projects, from sampling and design issues to regression, ANOVA, and non-linear least squares analysis.

2005 - 2007

**Teaching Assistant**

- Conducted weekly sections for 50 students in Introductory Statistics and Regression (graduate level).

1999 - 2005

**GOLDMAN SACHS GROUP, INC.**

**New York, NY**

2003 - 2005

**Vice President, Fixed Income Sales Strategies**

- Collaborated with three sales strategists to compose relative value trade ideas and strategy notes on Treasury, swap, and mortgage markets and distribute to sales force and traders.
- Promoted new Constant Maturity Mortgage products, which create a rate-based market out of price-based mortgage-backed securities. Ran back-testing to ensure proper model calibration and wrote educational material. Devised trade ideas, which resulted in some of earliest client transactions in nascent market.
- Interacted with cross-product team to tailor hedging strategies for clients' fixed income risk.
- Promoted to Vice President after five years with firm.

2000 - 2003

**Associate, Commodities Strategies**

- Structured and priced derivative products to hedge clients' exposure to energy prices.
- Managed bidding process on auctioned energy trading portfolios. Presented valuation and market/credit risk to sales, trading, legal, and credit personnel; led to acquisitions of distressed portfolios.
- Developed Monte Carlo simulation-based Credit Valuation Adjustment technology to calculate market value of credit risk in transactions; educated global franchise to incorporate credit charge into pricing.
- Promoted to Associate after two years with firm.

1999 - 2000

**Analyst, Energy Derivatives Sales**

- Recommended risk reducing strategies to North American oil and gas producers, airlines, and utilities.
- Executed flow swap and option transactions on oil and oil products, totaling 1MM barrels.

## Additional

- Native fluency in Japanese; traveled extensively in Japan.
- Ice Hockey: Harvard's Junior Varsity team (4 years). Captained Goldman Sachs' team in New York City. Play in various leagues in the Twin Cities, participated in tournaments in Sweden, Latvia, and Iceland.
- Enjoy hiking in national parks, rock climbing, running, gomoku, and reading contemporary fiction.