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New Haven, CT 06510

Tel: (561)289-2713

swang87@gmail.com

Education Yale University 08/2009 – present

Ph.D., Statistics

Thesis Topic: Graphical product partition models for multidimensional

changepoint detection

University of California, Berkeley

08/2004 - 05/2006

B.A., Applied Mathematics

GPA: 3.821 (Graduated with High Distinction in General Scholarship)

GRE: 710 (Verbal), 800 (Quantitative), 5 (Analytical Writing)

Awards & Leonard J. Savage Writing Prize (05/2012) **Achievements** Associate of the Society of Actuaries (08/2008)

Research Interests Bayesian statistics, clustering, change point detection, MCMC

Publications

Ryslik, Gregory, and XW. Exam 4/C Theoretical Knowledge & Exercises Preparation Textbook. New Jersey: Actuarial Empire, 2013. Print.

XW, Byars, Sean G., and Stearns, Stephen C. "Genetic connections between lifespan and completed family size in the Framingham Heart Study." *Evolution, Medicine, and Public Health*. (in submission)

Oatts, Julius T., et al. "Effect of Alpha-2-Agonist Premedication on Intraocular Pressure after Selective Laser Trabeculoplasty." (in revision)

Work Experience

Mathematician/Quantitative Analyst, WeatherBill (now The Climate Corp)

01/2008 - 08/2009

- Created and implemented method to simulate nationwide snowfall from temperature and rain data using machine learning
 - Algorithm uses parametric (for simulating snow amounts) and nonparametric (for simulating snow days) models
 - Optimized program for efficiency and scalability reduced overall runtime by 60%
- Simulations allow for active risk management under Return on Value at Risk (RoVaR) model
- Implemented robust detrending in pricing engine based on backtesting results
- Prepared customized weather risk analysis with proposed hedging solutions for large businesses in retail, energy, and outdoor entertainment industries
- Produced automated weather risk profile generator to provide dynamically populated factsheet based on client location and industry
- · Priced simple and compound weather derivatives using R

Pension Actuary, Mercer

07/2006 - 01/2008

- Performed 20+ valuations projecting client firms' pension liabilities decades into the future
- Reported 7 client firms' liabilities in government accounting forms
- Managed data (up to 30,000+ records per project) prepared data questions, updated data per client response
- Programmed 3 calculators used to estimate benefit for client's employees
- Tested 10+ retirement plans for discrimination in favor of executives

Other Computer Skills: Web Development HTML, PHP, ColdFusion

Programming C++, Java Scripting R, Python, Perl

Data Stata, MySQL, Excel VBA

Languages: English, Mandarin

Interests: Web programming, cooking, singing, badminton