Joanne J. Ho

School of Environmental and Forest Sciences

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Technical Skills

Statistical programming: R, S-plus, STATA, SAS, Eviews

Spatial programming: ArcGIS

Operating Systems: Linux, Windows Databases: MySQL, PostgreSQL, Oracle

Editing/Publishing: Microsoft Office Suite, LaTex, Prezi, WebEx

Languages

English: native

Chinese (Cantonese): native

Chinese (Mandarin): conversational

German: conversational Dutch: conversational

French: basic

Scientific Specializations

Natural Science

- Fire ecology: multivariate modeling between hydrology, vegetative growth, fuel consumption, weather and climate variability, and human intervention
- use of meteorological and atmospheric data in quantifying natural hazards
- Forest ecology: forest health and long-term environmental management for resource extraction

Social Science/Humanities

- Finance: asset pricing and option pricing applications to natural disaster risk management
- Economics: risk aversion and risk perception evaluation, systemic risk evaluation, international trade, currency valuation
- Anthropology: ethnographic methodologies to qualitative data collection
- Development Studies: food security, farm productivity, infrastructure, logistics, and supply chain development, market participation of remote communities

Quantitative methods

- extreme value theory
- multivariate regression
- time-series
- maximum likelihood estimation
- logit, probit, nested probit, conditional probit

- longitudinal and panel data
- censored and truncated data
- spatial regression
- cluster analysis
- principal component and factor analysis

Education

Information Systems for Crisis Response and Management, Tilburg University (Netherlands, Aug 2011)

- Emergency Improvement on Humanitarian Information Management and Logistics
- Summer School Certificate coursework

ScrumMaster Certification, Scrum Alliance (Seattle, Mar 2010)

• Leadership course on fostering self-directed teams and building self-empowering work environments

Ph.D. in Forest Resources, University of Washington (Seattle, Oct 06 - Dec 09)

- Advisor: John Perez-Garcia, Professor of Forest Resources
- Dissertation research: Wildfire and Weather in Southern California: an exploratory quantitative assessment

M.A. in International Economics, University of Sussex (Brighton, United Kingdom, Oct 05 - Sep 06)

- Advisor: Richardo Gottschalk, Senior Lecturer of Development Studies
- Dissertation: Valuation of the Chinese Renminbi: signs of macroeconomic stability and deep integration in East Asia

Postgraduate Diploma in Economics, University of Sussex (Brighton, United Kingdom, Oct 04 - Jun 05)

- Advisor: Sherman Robinson, Professor of Economics
- Concentration in international trade: gravity modeling and computational general equilibrium modeling
- GAMS workshop

B.A. in International Studies, University of Washington (Seattle, Sep 00 - Jun 04)

- Advisor: Stevan Harrell, Professor of Anthropology
- Jackson School of International Studies, International Political Economy, Honors
 Thesis: Pockets of Poverty in a Fast-growing Economy: Quantifying market shares in rural southwest China
- UW Worldwide Sichuan Joint Program in Environmental Research

Sichuan University, Chengdu, Sichuan, China (Sep 02-Aug 03):

• Chinese, Cultural Studies, Environmental Studies

Professional Experience

Founder & Consultant, 360 Consulting LLC (Feb 11-present)

• advise and support for- and not-for-profit research teams using Agile Methodologies to streamline research pipeline to maximize effectiveness and return on investment (ROI)

Statistical Analyst, Globys, Inc (Oct 09-Aug 10)

- Research: Analyze 2+ million of customer data to provide business intelligence for telecom carriers
- Predict customer behaviors and characteristics based on billing data using probabilistic estimation
- Recommend customer target groups for advertisers
- Advise on software development requirements based on analytical process

- Work with chief architect to design analytical database to optimize future analytical methodologies
- Project Management: Spearheaded team process change to Agile methodology using Scrum
- Scrum master for research team: transform traditional solitary research organization into paired workload, group problem-solving and consensus-making, and foster overall teamsmanship
- Facilitate communication across 3 teams by managing scrum-of-scrums and running daily stand-ups
- Sprint planning: Work with product owner to ensure meaningful research requirements vis-à-vis product vision.
- Assist product manager in backlog prioritization.

Research Fellow, University of Washington (Sep 06-Dec 09)

- Part of an interdisciplinary team of 7 researchers (biology, civil engineer, geology, anthropology, archeology, economics) with the following goals:
 - Identify effective ways to conduct interdisciplinary research through communication, identifying commonalities across disciplines, identify disciplinary strengths, project planning, and delegation of tasks.
 - Apply interdisciplinary approaches on a chosen environmental issue: Biodiversity protection and challenges posed by imports, immigration, recreation, and agricultural production in New Zealand
- Supervisor: Tom Hinckley, Ecologist, and Michael Brett, Civil Engineer

Visiting Researcher, Humboldt University at Berlin (Germany, Sep 08 - Sep 09)

- As a representative from the University of Washington Worldwide program, worked closely with Humboldt University's Farm Management Group under the Dept. of Agricultural Economics and Geography of Climates and Environmental Climatology under the Dept. of Climatology.
- Topics: climate change implications to catastrophic risks; securitization framework for individual catastrophic risks; financial risk assessment based on weather forecasting; spatial correlation of environmental hazards, joint probabilities of multi-hazards and implications to systemic risks.
- Supervisor: Martin Odening

Intern, Seattle City Light, Integrated Resource Planning (Jun 08-Sep 08)

- Planning Seattle's renewable energy resources based on demand growth and supply constraints
- Conduct scenario-based simulations city's energy demand in year 2020 based on expected population, climate, technological, and economic changes.
- Strategic planning of renewable resource acquisition based on feasibility, competition, and future cost projections.
- Geographic information system (GIS): map geographic locations of all potential renewable and non-renewable resource in western U.S. and their potential capacity, overlay with existing transmission lines and their current capacity.

Teaching Assistant, University of Washington (Sep 07- Dec 07)

- Topics: climate change impacts on global food security, technology and land-use management, intensive agriculture, biodiversity and agroforestry, political-economic issues to global food production and food distribution, methods to measuring nutrition
- Supervisor: David Battisti, Professor of Atmospheric Sciences

Consultant, University of Duisburg-Essen, Institute for Development and Peace (Aug 05-Sep 05)

- Contract project from World Bank to assess effectiveness of the Poverty Reduction Strategies Process (PRSP) in integrating rural political participation
- Interview civil society groups to investigate local government credibility
- Assess political structure of PRSP recipient countries
- Compare requirements as stated in PRSP and current situation on the ground

Consultant, University of Sussex, Department of Economics, Poverty Research Unit (Apr 05-Jul 05)

• Co-write policy recommendations to the Chinese government for 5-year economic development plan

• Literature review on rural labor mobility and hardships, geographic and economic constraints to growth as well as areas of potential growth

Seasonal Contractor, University of Washington (Jun-Sep 04)

- Human carrying capacity study on recreational use at Mt. Rainier National Park
- Collect spatial and temporal data on visitor use of trails, off-trail in high-traffic areas, wilderness areas, and water sources

Publications and Conferences

Ho, J. <u>The Struggling Academic's Guide to Research</u> (Dec 2012). A leadership and management guide for graduate students.

Agile Tour Brussels Presentation <u>Agile for Academic Research</u> (Sep 2013). Re-defining approaches to applied research based on lessons learned from software development management. Key concepts: prioritize stakeholder values, maintain organizational flexibility to respond to situational changes, relationship management

van den Heuvel, M., Ho, J., Benson, J. <u>Beyond Agile: Tales of Continuous Improvement</u>. Modus Cooperandi, Feb 2013. An international collection of narratives on corporate reorganizations from dysfunction towards healthy work environments that deliver customer needs.

- Ho, J. "Wildfire and Weather in Southern California: an exploratory quantitative assessment." PhD Dissertation for University of Washington, College of Forest Resources (Dec 2009)
- Ho, J., Odening, M. "Weather-based estimation of wildfire risk." SFB 649 Discussion Paper Series (Jun 2009). http://sfb649.wiwi.hu-berlin.de/papers/pdf/SFB649DP2009-032.pdf
- Ho, J. "Behind the Scenes: Economist Hedges Bets on Wildfires in California." LiveScience, August 22, 2008. http://www.livescience.com/technology/080822-bts-fire-risk.html
- Ho, J. "Valuation of the Chinese Renminbi: macroeconomic balances and regional integration in East Asia." Master of Arts Dissertation for University of Sussex, Department of Economics (Sep 2006).
- Harrell, S., Li, X., Ho, J., Warren, K., Nadal, R. "Historical Ecological Change in the Upper Baiwu Valley," prepared for the Fourth International Conference on Yi Studies, Meigu, China (Aug 2005).
- Ho, J. "Gendered Interactions in Yi Households: labor and resource allocation in Yangjuan Village," prepared for the Fourth International Conference on Yi Studies, Meigu, China (Aug 2005).
- Ho, J. "Rising Pockets of Poverty in a Fast-growing Economy: Quantifying market shares in rural southwest China." Honors Thesis for University of Washington, Jackson School of International Studies (May 2004). Advisor: Dr. Stevan Harrell, Professor of Anthropology

Awards

- German Academic Exchange Service (DAAD) Research Grant for Doctoral Candidates (Jan 09)
 6-month fellowship supporting collaborative research between U.S. doctoral candidate and German research institutions
- National Science Foundation Integrative Graduate Education and Research Traineeship (Oct 06)

 2-year fellowship at University of Washington for research on multinational models on the environment

and natural resource sustainable management

University of Sussex Alumni Scholarship Award (Jan 06)

University of Washington Undergraduate Library Research Award (Jun 04)

Total 52 applicants for 6 awards of US\$1000 on library-related research projects

University of Washington School of Arts and Sciences Dean's Undergraduate Research Award (Mar 04)

A one-year award of up to US\$2000 for the best proposed research projects, all Arts and Sciences undergraduates eligible, at least 12 awards granted

Mary Gates Research Scholarship (Sep 01 - Jun 02)

A \$4500 award supporting a proposed under

A \$4500 award supporting a proposed undergraduate research project under a University of Washington faculty for one academic year