

Olivia C. Lau

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EDUCATION

Harvard University Cambridge, MA

A.M., Statistics (GPA: 3.62) June 2006

- Courses: Bayesian data analysis, hierarchical (multi-level) models, causal inference and experimental design, survival risk analysis, general linear models, and exploratory data analysis

Ph.D., Political Science (GPA: 3.62) June 2008

- Dissertation: "Mind the (Gender) Gap: Institutions, Inequality, and Individual Freedom"
 - *Committee: Gary King (chair), Jeffry Frieden, Kevin Quinn*
 - Examines the gap in perceived freedom of speech between men and women in 36 countries using a multi-level logistic regression. Individual freedom varies within countries, in addition to between countries, and that wherever a gender gap in freedom exists, women feel less free than men. This gap is largest in middle-income countries and smallest in under-developed and developed countries.
- Awards and honors: 1st place R programming competition, 2007 UseR! Conference; Graduate Student Associate, Institute for Quantitative Social Sciences; Graduate Student Associate, Center for Basic Research in the Social Sciences; Jeanne Humphrey Block Dissertation Award

Stanford University Stanford, CA

A.B., Economics; History (GPA: 3.80, with high honors) June 2001

- Awards and honors: Phi Beta Kappa, Omicron Delta Epsilon, Stanford-in-Washington Fellow, undergraduate research grant for fine art photography, Stanford-in-Oxford

INTERESTS

Causal inference, experimental design, survey experiments, statistical (cloud) computing

WORK HISTORY

Google, Inc. Mountain View, CA
Senior Strategist, Product Quality Operations October 2011 - present

Food and Drug Administration Silver Spring, MD
Statistician, Office of Planning and Informatics, CDER September 2009 - present

- Evaluated FDA's regulatory performance and presented statistical findings to stakeholders, expediting the drug review process and supporting Congressional reauthorization of the Prescription Drug User Fee Act, which funds about \$700 million of FDA's annual budget
- Designing and executing statistical study of FDA's performance relative to the European Medicines Agency at the request of the Commissioner
- Managing a \$600,000 contract and a team of consultants to study the extent to which individuals with multiple chronic conditions are enrolled in clinical trials
- Responding to immediate-action requests to produce quantitative support for memoranda, press releases, and op-eds signed by the Commissioner
- Volunteering as a technical liaison on cloud computing between engineers and statisticians, chemists, and epidemiologists

Statistical Reviewer, Office of Biostatistics, CDER July 2008 - September 2009

- Analyzed patient-level clinical trials data to identify potential safety concerns in proposed drugs
- Advised pharmaceutical company executives on experimental design and clinical trials conduct

AES Consulting, LLC (currently Compass Lexecon) San Francisco, CA
Research Associate September 2001 - August 2002; June - July 2003

- Drafted expert report that led to the dismissal of a multi-million dollar lawsuit prior to trial
- Managed document discovery for a proposed billion dollar merger of satellite TV providers

The World Bank Washington, DC
Research Assistant June - August 2000

- Analyzed business metrics related to the privatization of state-owned telecommunications firms in Latin America and Asia

CONSULTING EXPERIENCE

Professional Short Course: “A Crash Course in R Programming”
UseR! 2010 Conference, National Institutes of Standards and Technology August 2010

- 4 hour covering the fundamentals, object oriented programming, proper lexical scoping, profiling and code optimization, and calling C/C++ and other foreign functions from R
- Earlier versions presented at 2004 and 2005 Meeting of the American Political Science Association, and 2004 Meeting of the Political Methodology Society

USAID “Voices from the Field” Project
Prime: Management Systems International June - September 2010

- Designed survey questionnaire, including anchoring vignette instruments
- Instructed USAID staff on the use and interpretation of survey data
- Created custom L^AT_EX report template to fit USAID style guidelines

SELECTED PRESENTATIONS AND COURSES TAUGHT

- Short Course: “A Crash Course in R Programming”
- Plenary Talk: “Toward a Common Framework for Statistical Analysis and Development.” Directions in Statistical Computing, Auckland University, New Zealand, 2007. Earlier version presented at 2006 UseR! Conference, Wirtschaftsuniversität Wien, Vienna, Austria
- Presentation: “Ecological Inference and Higher-Dimension Data Management.” UseR! Conference, Wirtschaftsuniversität Wien, Vienna, 2006
- Head Teaching Fellow: “Advanced Political Methodology” (Prof. Gary King), 2004

PROFESSIONAL SERVICE

- Member, American Statistical Association
- Organizing committee, 2010 UseR! Conference
- Program committee, 2007 UseR! Conference
- Reviewer, *Journal of the Royal Statistical Society, Series A*
- Reviewer, *Computational Statistics*
- Reviewer, *Journal of Politics*

SKILLS AND CERTIFICATIONS

- 9 years experience with R / S-plus, including open-source package development
- 7 years experience with cloud computing, including writing shell scripts
- L^AT_EX ninja (including dissertation template design, custom client template design, Beamer)
- Other languages: JAGS, STATA, SAS, C/C++ on Linux and Windows platforms
- Expert Microsoft Office skills (including Word, Excel, Powerpoint, and Project)
- Federal Acquisition Certification for Contracting Officer Technical Representative

References available upon request.