CURTIS S. SIGNORINO

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EDUCATION

- Ph.D., Political Science, Harvard University, 1998
- A.M., Political Science, Harvard University, 1996
- A.L.M., History, Harvard University, 1993
- M.S., Operations Research & Statistics, Rensselaer Polytechnic Institute, 1990
- B.S., Computer & Systems Engineering, Rensselaer Polytechnic Institute, 1988

EMPLOYMENT

• Associate Professor

Jul 2004-Present

Department of Political Science, University of Rochester, Rochester, NY

• Assistant Professor

Jul 1998-Jun 2004

Department of Political Science, University of Rochester, Rochester, NY

• Instructor

Jul 1997-Jun 1998

Department of Political Science, University of Rochester, Rochester, NY

• Lecturer: Math for Political Scientists

Sep 1996, 1997

Department of Government, Harvard University, Cambridge, MA

• Teaching Fellow: Introduction to International Conflict & Cooperation

Core Office and Department of Government, Harvard University, Cambridge, MA Feb-Jun 1996 Professors: Steve Rosen and Andy Moravcsik

• Senior Thesis Advisor

1996, 1997

Department of Government, Harvard University, Cambridge, MA

• Teaching Fellow: Advanced Quantitative Methodology

Sep 1995–Jan 1996

Department of Government, Harvard University, Cambridge, MA

Professors: Gary King and Brad Palmquist

• Research Assistant

Oct 92-Sep 95

Department of Government, Harvard University, Cambridge, MA

Professor: Gary King

• Project Manager: Theater Warfare Modeling & Simulation Mar 1992–Sep 1993 Adv. Plans & Programs: Modeling, Analysis, & Simulation Center, Hanscom AFB, MA

• Project Manager: Computer & Network Security Engineering
Air Force Intelligence Command, Operating Location MC, Hanscom AFB, MA

Jul 1989-Feb 1992

GRANTS & AWARDS

- Program in Empirical Policy Research (PEPR) Grants
 - 2011. "R Package for Flexible Functional Form Estimation" (Brenton Kenkel). \$2,000.
 - 2010. "R Code for Estimating Extensive-Form Games" (Brenton Kenkel). \$2,000.
 - 2009. "Estimation of Crisis Signaling Models" (Jinhee Jo). \$1,500.
- 2009. Warren Miller Prize for Best Article in *Political Analysis*.
- 2004. G. Graydon and Jane W. Curtis Award for Excellence in Teaching
- 2004. Outstanding Teaching in Political Science. American Political Science Association.
- National Science Foundation Research Grants
 - 2004. "The Statistical Analysis of Bargaining" (with Kris Ramsay). \$200,000.
 - 2002. "Discriminating Methods: Nonnested Tests for Strategic Choice Models" (with Kevin Clarke). \$175,000.
 - 1999. "Statistics Out on a Limb?: Strategic Interaction and the Statistical Analysis of International Conflict." \$149,995.
- 2000. Gosnell Prize for Best Conference Paper in Political Methodology
- 1998. Gosnell Prize Honorable Mention
- 1996. Mellon Dissertation Research Grant
- 1993–1996. Harvard Graduate School of Arts & Sciences Grant
- 1995. Hoover Institute Summer Program in International Politics
- 1993–1994. Atherton Fellow in International Relations, Harvard University

PUBLICATIONS

Google Scholar Citations

- "Estimating Extensive Form Games in R" (2013) with Brenton Kenkel. *Journal of Statistical Software*.
- "Knowing One's Future Preferences: A Correlated Agent Model with Bayesian Updating" (2013) with Muhammet Bas and Taehee Whang. Journal of Theoretical Politics. 2
- "Reply to Neal Beck" (2010) with David Carter. Political Analysis. 18(3):295-296.

- "Discriminating Methods: Tests for Nonnested Discrete Choice Models" (2010) with Kevin Clarke. *Political Studies*. UK. 58:368-388
- "Statistical Backwards Induction: A Simple Method for Estimating Recursive Strategic Models" (2008) with Muhammet Bas & Robert Walker. *Political Analysis*. 16(1):21-40. 71 Awarded 2009 Miller Prize for the best article published in *Political Analysis*.
- "On Formal Theory and Statistical Methods: A Response to Carrubba, Yuen, & Zorn." (2007) Political Analysis. 15(4):483-501.
- "A Unified Theory and Test of Extended Immediate Deterrence" (2006) with Ahmer Tarar.

 American Journal of Political Science. 50(July).

 125
- "Structure and Uncertainty in Discrete Choice Models." (2003) *Political Analysis*. 11(4). 148 Selected for *Political Analysis* virtual issue on "Advances in Discrete Choice Methods."
- "Strategic Misspecification in Regression Models" (2003) with Kuzey Yilmaz. American Journal of Political Science. 47(3):551-566.
 Awarded 2000 Gosnell Prize for the best paper in methodology presented at a conference that year.
- "Strategy and Selection in International Relations." (2002) International Interactions. March, 28:93-115.
- "Aggregation Among Binary, Count, and Duration Models: Estimating the Same Quantities from Different Levels of Data" (2001) with James E. Alt and Gary King. *Political Analysis*. 9(1):21-44.
- "Strategic Interaction and the Statistical Analysis of International Conflict." (1999)

 American Political Science Review. 93(2):279-98.

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 1998 Gosnell Prize Honorable Mention for best paper in methodology presented at a conference.
- "Tau-b or Not Tau-b: Measuring the Similarity of Foreign Policy Positions" (1999) with Jeffrey M. Ritter. *International Studies Quarterly*. 43(1):115-144.
- "Simulating International Cooperation under Uncertainty: The Effects of Symmetric and Asymmetric Noise." (1996) Journal of Conflict Resolution 40(1):152-205.
- "The Generalization in the Generalized Event Count Model, with Comments on Achen, Amato, and Londregan" (1996) with Gary King. *Political Analysis* 6:225-252.
- "A Correction for an Underdispersed Event Count Probability Distribution" (1995) with Rainer Winkelmann & Gary King. *Political Analysis* 5:215-28.

WORK IN REVIEW OR IN PROGRESS

Google Scholar Citations

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- "Separation in Strategic Choice Models" with Casey Crisman-Cox.
- "A Comparison of Machine Learning Techniques for Modeling Survey Nonresponse" with Antje Kirchner. Presented at the IAB Colloquium on Labour Market and Occupational Research, Institute for Employment Research, Nuremberg, Germany.
- "Good Times, Bad Times: Left-Censoring in Grouped Binary Duration Data"
 with David Carter. Presented at the 2012 annual meetings of the European Political Science Association, Midwest Political Science Association, and the Network of European Peace Scientists, the 2013 meeting of the International Studies Association, and at the University of St. Gallen Political Science and Democratic Governance seminar series.
- "Data Mining for Theorists"
 with Brenton Kenkel. Presented at the 2011 annual meetings of the European Consortium for Political Research, European Political Science Association, the Political Methodology Society; at the 2012 annual meeting of the Midwest Political Science Association; at the 2013 meeting of the international studies association. Also presented as a faculty seminar at the University of Essex Summer Program 2011 and at the University of Warwick 2013.
- "A Second-Best Solution to the Heckman Selection Problem: Selection Bias as Functional Form Misspecification"
 with Brenton Kenkel. Presented at the 2012 annual meetings of the European Political Science Association, the Midwest Political Science Association, and the Political Methodology Society.
- "Is Democracy the Sum of Its Parts? Aggregation and Indices in Statistical Analysis" 4
 with Jonathan Olmsted and Jun Xiang. Paper presented at the 2010 annual meetings of the American
 Political Science Association, Midwest Political Science Association, and the Peace Science Society, the
 2011 meeting of the European Political Science Association, and in seminars at Princeton University,
 Rice, and Texas A&M University.
- "A Method for Flexible Functional Form Estimation: Bootstrapped Basis Regression with Variable Selection"
 with Brenton Kenkel.
- "A Statistical Model of the Ultimatum Game" with Kris Ramsay. In review.

SOFTWARE DEVELOPMENT

- brstrat package for R (In progress)
 with Casey Crisman-Cox. A bias-reduction (i.e., Firth-like) estimator for strategic choice models.
- polywog package for R with Brenton Kenkel. Implements flexible functional form estimation using bootstrapped variable selection (e.g., adaptive lasso or SCAD) applied to basis vectors (e.g., polynomials or splines).

• games package for R

with Brenton Kenkel. Similar to STRAT below, but as a package for R. It includes new models, such as the ultimatum game, as well as likelihood profiling.

• STRAT

STRAT is a stand-alone program that allows users to estimate regression models for a number of common extensive form games. The user may select whether model uncertainty is due to agent error or private information. The program includes options for graphing and interpreting results.

• S

Gauss procedure to calculate the policy position similarity measure in Signorino & Ritter (1999).

INVITED SEMINAR TALKS, WORKSHOPS, SMALL CONFERENCES

- 2016. Empirical Implications of Bargaining Theory. Notre Dame. Peace Science.
- 2016. University of Konstanz. Workshop on Computational Social Science.
- 2015. Washington University, St. Louis. Department of Political Science.
- 2015. Empirical Implications of Bargaining Theory. Princeton University.
- 2014. Duke University Energy Initiative and the King Abdullah Petroleum Studies and Research Center joint workshop on Integrating Models of Bargaining. Duke University.
- 2014. Institute for Employment Research, Nuremberg, Germany. IAB Colloquium.
- 2014. University of St. Gallen, Switzerland. Department of Political Science.
- 2014. Forecasting International Events Workshop. ISA Toronto.
- 2013. Duke University. Workshop on Improving IR Models for Policymakers.
- 2013. University of Warwick, UK. Department of Economics.
- 2013. Networks and Interdependence Workshop. ISA San Francisco.
- 2011. Bilkent University. Workshop on Event Data Analysis. Held in Istanbul, Turkey.
- 2011. University of Essex, UK. Department of Politics.
- 2010. Emory University. Directions in Political Methodology.
- 2010. Rice University. Department of Political Science.
- 2009. Princeton University. Department of Politics.
- 2009. Texas A&M University. Department of Political Science.
- 2008. Oxford University, UK. Workshop on Dialogue and Innovation in Political Science.
- 2006. University of California, Berkeley. Department of Political Science.
- 2006. University of Minnesota. Department of Political Science.
- 2004. Washington University, St. Louis. EITM Guest Speaker.
- 2004. Duke University. Department of Political Science.
- 2004. Binghamton University. Conference on Selection in IR.
- 2001. Harvard University. Department of Government.
- 2001. University of Wisconsin, Madison. Department of Political Science.
- 2001. University of California, San Diego. Torrey Pines Workshop.
- 2001. University of California, Riverside. SCAMP.
- 2000. University of California, San Diego. Workshop on Research Frontiers in IR.

- 2000. Yale University. Department of Political Science.
- 2000. Emory University. Department of Political Science.
- 1999. New York University. Department of Politics.
- 1999. Pennsylvania State University. Department of Political Science.
- 1999. Ohio State University. Department of Political Science.
- 1999. Binghamton University. Binghamton, Cornell, Illinois Seminar in IR.
- 1998. Stanford University. Graduate School of Business.
- 1998. California Institute of Technology. Department of Social Sciences.
- 1998. University of Michigan. Department of Political Science.
- 1998. Duke University. Department of Political Science. Workshop on Models in IR.
- 1997. Yale University. Department of Political Science.
- 1997. University of Rochester. Department of Political Science.

COURSES TAUGHT

(G)raduate, (U)ndergraduate
* New course in curriculum

University of Rochester

- Statistical Methods
 - Applied Data Analysis (U)
 - Introductory Statistical Methods (U)
 - Probability and Inference (G)
 - Linear Models (G)
 - Maximum Likelihood Estimation (G)
 - Advanced Topics in Political Methodology (G*)
 - Estimating Games & Testing Formal Models (G*)
 - Quantitative Approaches to International Politics (G*)
 - Math for Political Scientists (G)
- International Relations
 - Theories of International Relations (U)
 - International Conflict History and Theory (G*)
 - Modeling International Conflict (G*)

Empirical Implications of Theoretical Models (EITM)

- International Relations Week (with Jim Morrow), Michigan, Summer 2003
- Random Utility Models & Strategic Choice, WashU, Summer 2005–2007
- Random Utility Models & Strategic Choice, UC Berkeley, Summer 2010
- Mixed Methods (with Scott de Marchi & Dustin Tingley), Duke, Summer 2014
- Mixed Methods (with Dustin Tingley), Duke, Summer 2016

Short Course on Selection and Strategic Models

- University of Essex (UK), Summer Program in Quantitative Methods, 2011-2013
- EITM Europe: Mannheim, Germany, 2013
- University of Konstanz, Germany, 2016

DEPARTMENTAL AND UNIVERSITY SERVICE

- Founder and Director of the Theory and Statistics Research Lab (the star lab), 2004—present www.rochester.edu/college/psc/thestarlab
 - Established graduate research computing lab with full-time system administrator
 - Created star lab fellows program
 - Provide funding awards for travel to the summer political methodology conference
 - Established the methods seminar series
- Director, Peter D. Watson Center for Conflict and Cooperation, 1999–2005 www.watson.rochester.edu
 - Established Watson Seminar Series
 - Provided funding for graduate student travel to conferences
- Director of Graduate Placement, 2003–2006, 2012–2013
- Developed initial version of department's "Honest Grad Numbers", 2013
- Graduate Admissions Committee, 2011
- Undergraduate Advisor, 2007, 2010–2011, 2012–2014.
- Cofounder (with John Duggan) of department's "Math Prefresher" for incoming graduate students, 2000
- Cofounder (with Gerald Gamm) and co-coordinator of "Riker Seminar" series, 1998–2000
- Chair and member of departmental job search committees, 1999—present
- Political Science dissertation advisor, 1999–present
- Institute for Data Science Hiring Committee, 2015–2016
- Institute for Data Science Steering Committee, 2014–present
- College Academic Petitions Committee, 2013–2015
- University Research Computing Committee, 2006, 2010–2015
- Chair of College's Social Sciences Working Group, 2005-2006
- College Faculty Council, 2000–2001, 2002–2003, 2009–2011
- Economics dissertation advisor, 1999–2002
- Simon School of Business dissertation advisor, 2014

SERVICE TO DISCIPLINE

- Chair, Host Committee for the Annual Meeting of the Society for Political Methodology, University of Rochester, 2015
- Chair, Program Committee for Annual Meeting of the Society for Political Methodology, University of Rochester, 2015
- Chair, Graduate Student Selection Committee for Annual Meeting of the Society for Political Methodology, University of Rochester, 2015
- Chair, John T. Williams Prize Committee, Society for Political Methodology, 2014–2015
- Co-coordinator, 2014 ISA Working Group (with Jeff Arnold) on "Forecasting International Events"
- Career Achievement Committee, Society for Political Methodology, 2012–2014
- Chair, Software Award Committee, Society for Political Methodology, 2011–2012
- Chair, Annual Meeting Program Committee (Michigan), Society for Political Methodology, 2008
- Graduate Student Poster Award Committee, Society for Political Methodology, 2008
- National Science Foundation Review Panel
- Editorial Board, American Journal of Political Science, 2013-present
- Editorial Board, Political Science Research & Methods, 2012-present
- Editorial Board, American Political Science Review, 2008-2012
- Editorial Board, Political Analysis, 2008-2009

REVIEWER FOR

American Journal of Political Science American Political Science Review Conflict Management & Peace Science European Union Politics International Organization International Security International Studies Quarterly Journal of Conflict Resolution Journal of Politics National Science Foundation Political Analysis Political Research Quarterly Sociological Methods & Research World Politics

PROFESSIONAL ASSOCIATIONS & WORKING GROUPS

- American Political Science Association, 1994–Present
- European Political Science Association, 2010-Present
- Society for Political Methodology, 1995–Present
- Midwest Political Science Association, 1994–Present
- International Studies Association, 1997–Present
- Peace Science Society International, 1998–Present

- American Statistical Association, 1997–Present
- Econometric Society, 1997–2010

STUDENTS

- Jeff Arnold, University of Washington
- Muhammet Bas, Harvard
- Robert Carroll, Florida State University
- David Carter, Princeton
- Tim Carter, Wayne State
- Tyson Chatagnier, University of Houston
- Songying Fang, Rice
- Stephen Gent, UNC-Chapel Hill
- Gang Guo, University of Mississippi
- Yukari Iwanami, Kansai Gaidai University
- Kerim Can Kavakli, Sabanci University
- Jeremy Kedziora, US Government
- Brenton Kenkel, Vanderbilt
- Tamar London, Penn State
- Elena Plaxina, Texas A&M
- Adam Ramey, NYU Abu-Dhabi
- Kris Ramsay, Princeton
- Branislav Slantchev, UC San Diego
- Arthur Spirling, NYU
- Ahmer Tarar, Texas A&M
- Robert Walker, Willamette University (Atkinson School of Management)
- Taehee Whang, Korea University
- Jun Xiang, Rutgers-Newark
- Kuzey Yilmaz, University of Rochester

CONSULTING

• Booz, Allen, Hamilton. Project: "Modeling Escalation" Sep 2016-Present