Bruce A. Desmarais — Curriculum Vitae

Department of Political Science
The Pennsylvania State University

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Employment

Professor of Political Science, Pennsylvania State University. 2020–Present.

DeGrandis-McCourtney Early Career Professor in Political Science. 2018–Present.

Associate Professor of Political Science, Pennsylvania State University. 2015–2020.

Assistant Professor of Political Science, University of Massachusetts Amherst. 2010–2015.

Affiliations

Associate Director, Center for Social Data Analytics, Pennsylvania State University, Fall 2018–Present

Director of Graduate Studies, Programs in Social Data Analytics, Pennsylvania State University, Fall 2017–Present

Faculty Affiliate, Pennsylvania State University Institute for Computational and Data Sciences, Fall 2015–Present.

Education

Ph.D. Political Science, University of North Carolina at Chapel Hill, 2010
Specialties: Research Methods and American Politics

M.A. Political Science, University of North Carolina at Chapel Hill, 2008

B.A. Mathematical Economics and Public Policy, Eastern Connecticut State University, 2005, *Summa Cum Laude*

Recent Related Publications

Book

1. Skyler J. Cranmer, Bruce A. Desmarais, and Jason W. Morgan. *Inferential Network Analysis*. Analytical Methods for Social Research. Cambridge University Press, 2020

Journal Articles

11. Christian Schmid, Ted Hsuan Yun Chen, and Bruce Desmarais. Generative dynamics of supreme court citations: Analysis with a new statistical network model. *Political Analysis*, Accepted
10. Fridolin Linder, Bruce Desmarais, Matthew Burgess, and Eugenia Giraudy. Text as policy: Measuring policy similarity through bill text reuse. *Policy Studies Journal*, 48(2):546–574, 2020
9. Frederick J Boehmke, Mark Brockway, Bruce A Desmarais, Jeffrey J Harden, Scott LaCombe, Fridolin Linder, and Hanna Wallach. Spid: A new database for inferring public policy innovativeness and diffusion networks. *Policy Studies Journal*, 48(2):517–545, 2020
8. Shana Scogin, Sarah Petersen, Jeffrey Harden, and Bruce Desmarais. modelltest: An r package for unbiased model comparison using cross validation. *Journal of Open Source Software*, 4(41):1542, 9 2019
7. Bruce A. Desmarais. Punctuated equilibrium or incrementalism in policymaking: What we can and cannot learn from the distribution of policy changes. *Research & Politics*, 6(3), 2019
6. Paul E Stillman, James D Wilson, Matthew J Denny, Bruce A Desmarais, Skyler J Cranmer, and Zhong-Lin Lu. A consistent organizational structure across multiple functional subnetworks of the human brain. *NeuroImage*, 197:24–36, 2019

5. Sayali Phadke and Bruce A Desmarais. Considering network effects in the design and analysis of field experiments on state legislatures. *State Politics & Policy Quarterly*, 19(4):451–473, 2019
4. Shankar Bhamidi, Suman Chakraborty, Skyler Cranmer, and Bruce Desmarais. Weighted exponential random graph models: Scope and large network limits. *Journal of Statistical Physics*, 173(3-4):704–735, 2018
3. Bruce A Desmarais. Discussion of "inferring social structure from continuous-time interaction data". *Applied Stochastic Models in Business and Industry*, 34(2):107–109, 2018
2. Jake Bowers, Bruce A. Desmarais, Mark Frederickson, Nahomi Ichino, Hsuan-Wei Lee, and Simi Wang. Models, methods and network topology: Experimental design for the study of interference. *Social Networks*, 54:196 – 208, 2018
1. Philip Leifeld, Skyler Cranmer, and Bruce Desmarais. Temporal exponential random graph models with btergm: Estimation and bootstrap confidence intervals. *Journal of Statistical Software, Articles*, 83(6):1–36, 2018

Peer Refereed Proceedings

5. Fangcao Xu, Bruce Desmarais, and Donna Peuquet. Stand: A spatio-temporal algorithm for network diffusion simulation. In *Proceedings of the 3rd ACM SIGSPATIAL International Workshop on GeoSpatial Simulation*, GeoSim '20, page 2029, New York, NY, USA, 2020. Association for Computing Machinery
4. Sangyeon Kim, Omer F Yalcin, Samuel E Bestvater, Kevin Munger, Burt L Monroe, and Bruce A Desmarais. The effects of an informational intervention on attention to anti-vaccination content on youtube. In *Proceedings of the International AAAI Conference on Web and Social Media*, volume 14, pages 949–953, 2020
3. Bruce A Desmarais and John A Hird. Policy-relevant science: The depth and breadth of support networks. In *Complex Networks XI*, pages 385–392. Springer, 2020
2. T. Marple, B. Desmarais, and K. L. Young. Collapsing corporate confusion: Leveraging network structures for effective entity resolution in relational corporate data. In *2017 IEEE International Conference on Big Data (Big Data)*, pages 2637–2643, Dec 2017
1. C. S. Schmid and B. A. Desmarais. Exponential random graph models with big networks: Maximum pseudolikelihood estimation and the parametric bootstrap. In *2017 IEEE International Conference on Big Data (Big Data)*, pages 116–121, Dec 2017

Related Software Projects

4. Shana Scogin, Sarah Petersen, Jeff Harden, and Bruce A. Desmarais. *modeLLtest: Compare Models with Cross-Validated Log-Likelihood*, 2020. R package version 1.0.3
3. Fridolin Linder and Bruce A. Desmarais. *NetworkInference: Inferring latent diffusion networks*, 2017. R package version 1.1.1
2. Matthew J. Denny, James D. Wilson, Skyler Cranmer, Bruce A. Desmarais, and Shankar Bhamidi. *GERGM: Estimation and Fit Diagnostics for Generalized Exponential Random Graph Models*, 2016. R package version 0.10.5
1. Philip Leifeld, Skyler J. Cranmer, and Bruce A. Desmarais. *xergm: Extensions for Exponential Random Graph Models*, 2016. R package version 1.7.0

Recent Related Presentations

Recent Invited Talks

5. "Attention to the COVID-19 pandemic on Twitter: Partisan differences among U.S. state legislators." Facebook Core Data Science, March 25th, 2021.
4. "Network Event History Analysis for Modeling Public Policy Adoption with Latent Diffusion Networks." Quantitative Social Science Colloquium , Princeton University, April 12th, 2019.

3. "Complex Dependence in Foreign Direct Investment: Network Theory and Empirical Analysis." Workshop on Modeling Spatial and Network Interdependence in International Relations, University of St. Gallen, December 8, 2018.
2. "Complex Dependence in Foreign Direct Investment: Network Theory and Empirical Analysis." ISA Workshop on Modeling Spatial and Network Interdependence in International Relations, San Francisco, April 3, 2018.
1. "A Network Model for Textual Communications Application to Government Email Corpora." Center for Statistics and the Social Sciences, University of Washington, Seattle. April 19, 2017.

Recent Conference Presentations

4. "Diffusion of Candidates in Campaign Finance Networks." Political Networks Conference, 2018, George Mason University.
3. "A Network Model for Textual Communications Application to Government Email Corpora." Annual Meeting of the Society for Political Methodology, 2017, University of Wisconsin.
2. "Models, Methods and Network Topology: Experimental Design for the Study of Interference." Southern Political Science Association Annual Meeting. San Juan, PR. January 7, 2016.
1. "Modeling Interpersonal Government Communication Networks." Southern Political Science Association Annual Meeting. New Orleans, LA. January, 2015.

Invited Workshops

4. Advanced Network Analysis (ICPSR Summer Program, 2012–2015, 2018–2019)
3. Introduction to Network Analysis in R (Political Network Conference, 2016–2018)
2. Network Analysis: Statistical Inference with Exponential Random Graph Models (UNC Chapel Hill, Odum Institute, May 2014)
1. TERGM: Exponential Random Graph Models for Dynamic Network Data (George Mason University, January 2014)

Recent Related Grants

4. NSF Award Number SES- 2028675. "RAPID: Collaborative Research: The Diffusion of State Policy Responses to the 2019 Novel Coronavirus," effective 05/15/2020; $16,417.00.
3. NSF Award Number SES-1637089. "RIDIR: Collaborative Research: DAPPR: Diffusion Analytics for Public Policy Research" effective October 1, 2016 and expires September 30, 2019. Penn State total: $142,425.
2. NSF Award Number SES-1558661. "Collaborative Research: An Expanded Framework for Inferring Public Policy Diffusion Networks." Effective June 15, 2016 and expires May 31, 2018. Penn State total: $178,953.
1. NSF Award Number SES-1357606. "Collaborative Research: Specification and Estimation of Exponential Family Random Graph Models for Weighted Networks." effective April 15, 2014 and expires April 14, 2015. UMass Amherst total: $78,131.

Recent Related Professional Service

5. Host, Annual Conference on Political Networks (PolNet) 2021
4. Editorial Board Member, *State Politics & Policy Quarterly*, 2020 – Present.
3. 2018–2019 President, Political Networks section of the American Political Science Association.
2. Ninth Annual Conference on New Directions in Analyzing Text as Data, 2018, Program Committee Member.
1. Program Committee Member, International Conference on Social Informatics, 2014, 2016, 2017