Alexander (Zander) C. Furnas, PhD

Contact Center for Science of Science and Innovation Information

Department of Management and Organizations

Kellogg School of Management

Northwestern University Evanston, IL 60208

Appointments

Northwestern University, Evanston, IL USA

Research Assistant Professor, Center for Science of Science and Innovation 2021-

Postdoctoral Scholar, Center for Science of Science and Innovation 2020-2021

Voice: (734) 239-5505

E-mail: zfurnas@gmail.com

Website: www.alexanderfurnas.com

Maryland Institute College of Art, Baltimore, MD USA

Adjunct Faculty, Data Analysis and Visualization Program 2021-

University of Michigan, Ann Arbor, Michigan USA

Rackham Predoctoral Fellow, Rackham Graduate School 2019-2020

Ford Fellow, Department of Political Science 2017-2019

Research Interests Information & expertise, Congress, science funding, interest group representation, political nonprofits, lobbying, campaign finance, legislative behavior, network inference, natural language processing, computational social science.

EDUCATION

Ph.D. University of Michigan, Department of Political Science, Ann Arbor, Michigan USA

American Politics Major with Honors and Quantitative Methods Minor, 2020

Dissertation: Outsourced Congress: How Congress Relies on Outside Organizational Policy In-

formation

Committee: Richard Hall (Co-Chair), Charles Shipan (Co-Chair), Brendan Nyhan, Arthur Lupia

M.Sc. University of Oxford, Oxford Internet Institute, Oxford, United Kingdom

Distinction, Social Science of the Internet, August, 2012

Thesis: You Are Who You Follow?: Semantic Similarity of Political Partisans' Ego-Networks on

Twitter.

Advisor: Sandra Gonzólez-Bailón

B.A. Wesleyan University, Middletown, Connecticut USA

High Honors, the College of Social Studies, May, 2011

Thesis: e-Pluribus Unum: Direct Democracy through Peer Production

JOURNAL ARTICLES Crosson, Jesse, Alexander C. Furnas, Timothy Lapira, and Casey Burgat (2021), Partisan Competition and the Decline in Legislative Capacity among Congressional Offices. Legislative Studies Quarterly, 46: 745-789. https://doi.org/10.1111/lsq.12301

Furnas, Alexander C., Jesse Crosson, and Geoffrey Lorenz (2021), "Pandemic Pluralism: Legislator Championing of Organized Interests in Response to COVID-19", Journal of Political Institutions and Political Economy: Vol. 2: No. 1, pp 23-41. http://dx.doi.org/10.1561/113.00000028

Crosson, Jesse M., Alexander C. Furnas, and Geoffrey Lorenz. "Resources and Agendas: Combining Walker's Insights with New Data Sources to Chart a Path Ahead." *Interest Groups and Advocacy*, 10, no. 1 (2021): 85-90.

Furnas, Alexander C. "Coalitions and coordination in Washington think tanks: board interlock among Washington D.C.-based policy research and planning organizations." *Applied Network Science* 5, no. 83 (2020): https://doi.org/10.1007/s41109-020-00318-7

Crosson, Jesse, Alexander C. Furnas, Timothy LaPira, and Casey Burgat. "Partisan Competition and the Decline in Legislative Capacity among Congressional Offices." *Legislative Studies Quarterly*, (2020).

Crosson, Jesse, Alexander C. Furnas, and Geoffrey Lorenz. "Polarized Pluralism: Organizational Preferences and Biases in the American Pressure System." *American Political Science Review* 114, no. 4 (2020): 11171137. doi:10.1017/S0003055420000350.

 2019 Best Paper Award from the section on Political Organizations and Parties of the American Political Science Association

Lorenz, Geoffrey, Alexander C. Furnas and Jesse Crosson. "Large-N Interest Group Bill Positions from Maplight.org." *Interest Groups & Advocacy* 9, (2020): 342360.

Furnas, Alexander C., Michael Heaney and Timothy LaPira. "The Partisan Ties of Lobbying Firms" Research & Politics 6, no. 3 (2019): https://doi.org/10.1177/2053168019877039.

- 2017 Best Paper Award from the section on Political Organizations and Parties of the American Political Science Association
- Honorable Mention for the 2018 Best Paper Award from the Standing Group on Interest Groups of the European Consortium on Political Research (ECPR).

Edwards, Benjamin, Alexander C. Furnas, Stephanie Forrest, and Robert Axelrod. "Strategic aspects of cyberattack, attribution, and blame." *Proceedings of the National Academy of Sciences* 114, no. 11 (2017): 2825-2830.

BOOK CHAPTERS

Furnas, Alexander C., Lee Drutman, Alexander Hertel-Fernandez, Kevin Kosar and Timothy LaPira. "The Congressional Capacity Survey: Some takeaways about who staff are, how they got there, what they do, and where they may go" In *Congress Overwhelmed: The Decline in Congressional Capacity and Prospects for Reform*, edited by Lee Drutman, Kevin Kosar and Timothy LaPira. Chicago: University of Chicago Press. Forthcoming 2020.

Furnas, Alexander C. and Lee Drutman. "Descriptive Network Analysis: interest group lobbying dynamics around immigration policy." In *Government, Policy and Analytics*, edited by Jennifer Bachner and Kathryn Wagner Hill. New Haven: Yale University Press, 2017.

Furnas, Alexander C. "Procurement Disclosure in the Slovak Republic." In *Civic Media Project*, edited by Eric Gordon and Paul Mihailidis. Cambridge: MIT Press, 2015.

Reports

Furnas, Alexander C. and Timothy M. LaPira "Congressional Brain Drain: Legislative Capac-

ity in the 21st Century." New America. 2020. Available: https://www.newamerica.org/political-reform/reports/congressional-brain-drain/

- Cited in the Final Report of The Select Committee on the Modernization of Congress, October 2020. Available: https://modernizecongress.house.gov/final-report/chapter/chapter-3-improve-congressional-capacity
- Cited at length in letter from Majority Leader Steny Hoyer and Democratic House Caucus chair Hakeem Jefferies to the chairs of the House Appropriations Subcommittee on the Legislative Branch strongly urging a 20 percent increase in money allocated to pay congressional staffers (in line with increases that we suggested in our white paper).
- Letter from Alexandria Ocasio-Cortez and 110 other members of the house sent a letter to the subcommittee urging a similar reform used our finding that staffers leave congress on average, after three years.
- Ultimately 21 percent increase in Congressional Members Representative Allowance was included in the final Legislative Branch Appropriations Act of 2021.

Under Review

More than Mere Access: An Experiment on Moneyed Interests, Information Processing, and Legislative Action in Congress (with Timothy LaPira, Alexander Hertel-Fernandez, Kevin Kosar and Lee Drutman). Revise and Resubmit with Minor Revisions to *Political Research Quarterly*

The People Think What I Think: False Consensus and Elite Misperception of Public Opinion. (with Timothy M. LaPira)

Estimating Proposal and Status Quo Locations for Legislation using Cosponsorships, Roll-Call Votes, and Interest Group Bill Positions (with Jesse Crosson and Geoff Lorenz)

The Junior Americanist Workshop Series (JAWS), invited contribution to *Political Science & Politics*, (with Christina Ladam, Austin Bussing, Josh McCrain, David R. Miller, and Rachel Porter)

Working Papers

(Dis)trust in Science among Political Elites. (with Timothy M. LaPira and Dashun Wang)

Biasing Their Bosses: Staff Ideology, Motivated Reasoning, and the Distortion of Information in Congress.

Elite Ideology, Partisanship & Information: Two experiments on political elites (with Timothy M. LaPira).

Text Re-use and Paraphrase Detection with Semantically Aware Smith-Waterman Local Alignment.

Gaining Access Without Buying It: Campaign Contributions, Allies, and Lobbying on Capitol Hill (with Richard Hall and Robert Van Houweling).

Using Model Legislation to Estimate Ideology Scores for State Legislators (with Charles Shipan).

Book Project: Polarizing Pluralism: Party Competition, Interest Group Strategy, and the Resurgent Mischiefs of Faction. (with Jesse Crosson and Geoff Lorenz)

OTHER WORKS IN PREPARATION

The political mobilization of scientists in the United States. (with Jian Gao, Yian Yin, and Dashun Wang).

Partisan Funding of Science in the United States. (with Nic Fishman, Leah Rosenstiel, Ben Hammond, and Dashun Wang).

A Bridge Too Far? Sparsity & Bridge Selection Effects in Ideal Point Estimation (with Alton Worthington).

Sense of Belonging Among Congressional Staff: Does Gender Matter? (with Kelly Dittmar and Timothy LaPira).

Legislative Effectiveness and Legislative Cue-Taking: A congressional staff vignette experiment (with Timothy LaPira).

ORIGINAL DATASETS

The 2020 Survey of Political Elites and Public Servants (with Timothy LaPira).

The 2019 Congressional Capacity Study (with Timothy LaPira).

The 2017 Congressional Capacity Study (with Alexander Hertel-Fernandez, Timothy LaPira, Kevin Kosar and Lee Drutman).

Congress and Its Experts (with Jesse Crosson and Timothy LaPira).

SELECTED PUBLIC WRITING

Furnas, Alexander C. and Timothy M. LaPira. "Almost a quarter of influential Republicans deny Bidens victory, survey says." Washington Post's Monkey Cage. January 12, 2020.

Furnas, Alexander C. and Michael T. Heaney. "How does changing control of Congress affect the fortunes of lobbying firms?" *Mischiefs of Faction*. October 3, 2019.

LaPira, Timothy M, and Alexander C. Furnas. "Paying Congresss interns a living wage is a good idea. Paying professional staff one is even better." *Vox.* December 13, 2018.

Furnas, Alexander C. "Legislative staff are spending an increasing amount of time on constituent services." *LegBranch.org.* April 11, 2018.

Drutman, Lee and Alexander Furnas. "Whos putting the most money against net neutrality?" *Daily Dot.* September 4, 2014.

Furnas, Alexander. "Why Representative Democracies Can't Write Off Transparency." The Atlantic. January 16, 2014.

Drutman, Lee and Alexander Furnas. "K Street pays top dollar for revolving door talent." Sunlight Foundation. January 21, 2014.

Furnas, Alexander. "You Can't Use Twitter to Predict Election Results" *The Atlantic*. May 15, 2012.

EXTRAMURAL FUNDING

New America and Electoral Reform Research Group Grant, New America (\$31,322) 2021

Research Grant, Tides Advocacy (\$19,681) 2020

Congressional Research Grant, Dirksen Congressional Center (\$3,480) 2020

	AWS Cloud Credits for Research, $Amazon$ (in kind \$2,400)	2019	
	Humane Studies Fellowship, Institute for Humane Studies (\$4,000)	2019	
	Research Grant, Democracy Fund (\$10,401)	2018	
	Research Grant, Center for Effective Lawmaking (\$2,000)	2018	
	New America Summer Fellowship, $Government\ Reform\ Program\ (\$11,000)$	2017	
	NSF PolNet Travel Fellowship (\$900)	2016	
Intramural Funding	Rackham Pre-Doctoral Fellowship, <i>University of Michigan</i> (\$44,956 plus benefits)	2019-2020	
	Ford Fellowship, University of Michigan (\$35,316 per year, plus benefits)	2017-2019	
	Ford Fellowship Research Grant, University of Michigan (\$3,000)	2018	
	Ford Fellowship Research Grant, University of Michigan (\$3,700)	2017	
	Library Data Grant, University of Michigan (in kind \sim \$5,000)	2017	
	Summer Collaboration Grant, Political Science, University of Michigan (\$2,000)	2016	
	ISR-Rackham Summer Training Award (\$2,500)	2015	
	Summer Collaboration Grant, Political Science, University of Michigan (\$8,000)	2015	
	Davenport Study Grant, Wesleyan University (\$2,500)	2010	
Honors & Awards	Silver (Unusual Category), Information is Beautiful Awards	2019	
& TWARDS	Best APSA Paper Award, Political Organizations and Parties Section 2019	$({\rm Awarded}\ 2020)$	
	Best APSA Paper Award, Political Organizations and Parties Section 2017	(Awarded 2019)	
	Honorable Mention Best Paper Award, ECPR Standing Group on Interest Groups	2018	
Conference Presentations and Posters	American Political Science Association Annual Meeting & Exhibition 2016, 2017, 2018, 2019, 2020, 2021		
	Outlier Conference	2020	
	Annual Political Networks Conference (PolNet)	2013, 2015, 2016	
	European Consortium for Political Research General Conference	2018	
	Midwest Political Science Association Conference Annual Conference 2015, 2016, 2020	2017, 2018, 2019,	

National Council for Science and the Environment Conference
Southern Political Science Association Conference Annual Meeting

2020

2018

INVITED TALKS AND "Data Sources for Interest Group Research," Political Organizations and Parties (POP) Section Workshops September 29, 2021

"Interest Groups and Representation with an application to legislative politics in the United States," ECPR summer school on interest groups and lobbying, University of Ljubljana July 6, 2021

"Congress and Information," Dept. of Pharmacology, University of Michigan December 2, 2019

"2019 Congressional Capacity Survey," Democracy Fund

February 1, 2019

"Who Actually Develops Policy?," New America.

March 1, 2018

"Introduction to Network Visualization," Johns Hopkins Krieger School

November 11, 2015.

"Untangling the Webs of Immigration Lobbying," Data Science D.C.

June 18, 2013

Media Appearances Wireframe, Podcast, "How do designers use data visualization to take the numb out of numbers?" June 7, 2021

 $Politics\ In\ Question,$ Podcast, "How Important is Expertise and Experience in Congress?" September 14, 2020

Computing Up, Podcast, "Zander Furnas on Politics as Computation."

December 1, 2019

 $\it Data\ Viz\ Today,$ Podcast, "How to Use Data Viz to Bring People Together and Feel Connected." July 30, 2019

Spark with Nora Young, CBC Radio, Episode #184.

June 3, 2012

Thom Hartman Show, Interview.

April 18, 2012

Teaching

Maryland Institute College of Art, Data Analytics and Visualization (MPS)

Instructor, MVIS 5702.01: Design Lab 2 - Industry Challenge

Fall 2021

University of Michigan

Instructor, ICOS Big Data Camp

June 2019

Instructor, POLSCI 111: Introduction to American Politics

 $Summer\ 2018$

Graduate Student Instructor, Text as Data with Brandon Stewart (Computational Social Science Initiative Methods Workshop)

 $\mathrm{Dec}\ 1,\ 2017$

- -

Graduate Student Instructor, POLSCI 381: Political Science Research Design

Spring 2017

	Instructor, POLSCI 514: The Use of Social Science Computer Programs	Fall 2016	
	Wesleyan University		
	Preceptor, Government Tutorial, College of Social Studies	2010-2011	
Pedagogical Training	Sweetland 993 (half-semester training for upper-level writing instructors)	Spring 2017	
	POLSCI 993 (two-semester instructor training)	2014-2015	
	GSI Teaching Orientation, Center for Research on Learning and Teaching	Fall 2015	
SERVICE	Junior Americanist Workshop Series (JAWS), Co-Founding Coordinator	2020-present	
	Professional Development Committee, Member, University of Michigan	2018-2019	
	American Institutions Group, Co-Coordinator, University of Michigan	2017-2018	
	American Institutions Search Committee, Member, University of Michigan	2017	
	Interdisciplinary Workshop on American Politics, Co-Coordinator, University of Michigan 2015-2016		
	Conference discussant: Midwest Political Science Association (2019); American Political Science Association (2019); "The State of Congressional Capacity Conference", New America Foundation (2018); "The Role of Special Interests in American Politics", University of Michigan (2015); Interdisciplinary Workshop on American Politics, University of Michigan (2015, 2016, 2017, 2018).		
	Data Visualization Society, Moderator, Facilitator	2019-present	
	Journal Reviewer: Journal of Politics; Legislative Studies Quarterly; Political Research Quarterly; Journal of Race, Ethnicity, and Politics; European Journal of Political Science; Social Network Analysis and Mining; PLOS ONE.		
Professional Memberships	American Political Science Association (Political Networks, Legislative Studies, Political Organizations and Parties sections)	2014-present	
	Midwest Political Science Association	2015-present	
	Data Visualization Society	2019-present	
Past Professional Experience	Research Assistant, Professor Nancy Burns, University of Michigan	2020	
	Data Visualization Consultant, Dr. Lee Drutman	2019	
	Research Assistant, Professor Charles Shipan, University of Michigan	2016	
	Research Assistant, Professor Robert Axelrod, University of Michigan	2015-2016	

Project Management Intern, Credit Suisse, New York, New York

Summer 2010

Computer Skills Programming Languages: Python, R, SQL.

Statistical Computing and Packages: the Tidyverse in R; Python data analysis libraries (e.g. Pandas, Numpy, Scipy, SciKit-Learn), NLTK and Genesim for text processing and topic modeling, BeautifulSoup and Selenium for web-scraping; rusty STATA.

Applications: Most network analysis tools (especially igraph, statnet, Pajek and Gephi), LATEX, common database, spreadsheet, and presentation software.

References

Charles Shipan, Ph.D.

J. Ira and Nicki Harris Professor

Political Science University of Michigan Phone: (734) 615-9140 Email: cshipan@umich.edu

Richard Hall, Ph.D.

Professor

Gerald R. Ford School of Public Policy

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Dashun Wang, Ph.D.

 $\operatorname{Professor}$

Management Organizations, Kellogg School of Management

Northwestern University Phone: 847-491-8070

Email: dashun.wang@kellogg.northwestern.edu

Arthur Lupia, Ph.D. Hal R. Varian Collegiate Professor Political Science University of Michigan Phone: (734) 615-9118 Email: lupia@umich.edu

Brendan Nyhan, Ph.D. Professor Government

Dartmouth University Phone: 603-646-2894 Email: nyhan@dartmouth.edu