

# Alexander Herzog, Ph.D.

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## EMPLOYMENT

**Clemson University**, Lecturer, School of Computing 2017–present  
Research Scientist, Data Intensive Computing Ecosystems (DICE) Lab

**Clemson University**, Postdoctoral Researcher and Professor of Practice 2014–2017  
School of Computing, Data Intensive Computing Ecosystems (DICE) Lab,  
Social Analytics Institute

**London School of Economics**, Postdoctoral Fellow 2012–2014  
Department of Government

## EDUCATION

**New York University**, Ph.D. Political Science 2006–2012  
*Dissertation*: Public Policy in Cabinet Governments  
*Committee*: Michael Laver, Howard Rosenthal, Joshua Tucker

**University of Mannheim**, Germany, Diplom in Social Sciences 2002–2006

**University of Konstanz**, Germany, Vordiplom in Public Policy and Management 2000–2002

## ADDITIONAL TRAINING & VISITING POSITIONS

Big Data Infrastructure and Industry Applications (lecture) Fall 2014  
School of Computing, Clemson University

Empirical Implications of Theoretical Models (summer school), UC Berkeley June/July 2010

Trinity College Dublin, Ireland, Visiting Researcher 2009–2010

## PUBLICATIONS

### Peer-Reviewed Articles

Sara Hagemann, Stefanie Bailer, and Alexander Herzog. Signals to their parliaments: governments' strategic use of votes and policy statements in the Council of the European Union. *Journal of Common Market Studies* (forthcoming), 2019.

Justin Sybrandt, Angelo Carrabba, Alexander Herzog, and Ilya Safro. Are abstracts enough for hypothesis generation? In *Proceedings of the 2018 IEEE International Conference on Big Data*, December 2018.

Brandon Posey, Christopher Gropp, Boyd Wilson, Boyd McGeachie, Sanjay Padhi, Alexander Herzog, and Amy Apon. Addressing the challenges of executing a massive computational cluster in the cloud. In *Proceedings of the 18th Annual IEEE/ACM International Symposium in Cluster, Cloud, and Grid Computing (CCGrid 2018)*, May 2018.

Neela Avudaiappan, Alexander Herzog, Sneha Kadam, Yuheng Du, Jason Thatcher, and Ilya Safro. Detecting and summarizing emergent events in microblogs and social media streams by dynamic centralities. In *Proceedings of the 2017 IEEE International Conference on Big Data*, 2017.

Yuheng Du, Alexander Herzog, Andre Luckow, Ramu Nerella, Christopher Gropp, and Amy Apon. Representativeness of latent Dirichlet allocation topics estimated from data samples with application to Common Crawl. In *Proceedings of the 2017 IEEE International Conference on Big Data*, 2017.

Alexander Herzog and Slava Mikhaylov. Database of parliamentary speeches in Ireland, 1919-2013. In *Proceedings of the 1st IEEE International Conference on the Frontiers and Advances in Data Science*, 2017.

Brandon Posey, Christopher Gropp, Alexander Herzog, and Amy Apon. Automated cluster provisioning and workflow management for parallel scientific applications in the cloud. In *Proceedings of the 10th Workshop on Many-Task Computing on Clouds, Grids, and Supercomputers (MTAGS)*. Workshop held in conjunction with the 2017 International Conference for High Performance Computing, Networking, Storage and Analysis, 2017.

Benjamin E. Lauderdale and Alexander Herzog. Measuring political positions from legislative speech. *Political Analysis*, 24(3):374–394, 2016.

Alexander Herzog and Kenneth Benoit. The most unkindest cuts: speaker selection and expressed government dissent during economic crisis. *Journal of Politics*, 77(4):1157–1175, 2015.

Alexander Herzog and Joshua A. Tucker. The dynamics of support: the winners-losers gap in attitudes towards EU membership in post-communist countries. *European Political Science Review*, 2(2):235–267, 2010.

Franz Urban Pappi, Alexander Herzog, and Ralf Schmitt. Koalitionssignale und die Kombination von Erst- und Zweitstimme bei den Bundestagswahlen 1953 bis 2005 [Coalition signals and the combination of first and second vote in Bundestag elections 1953 to 2005]. *Zeitschrift für Parlamentsfragen*, 37(3):493–513, 2006.

Franz Urban Pappi, Axel Becker, and Alexander Herzog. Regierungsbildung in Mehrebenensystemen: zur Erklärung der Koalitionsbildung in den deutschen Bundesländern [Government formation in multilevel systems: explaining coalition building in the German Länder]. *Politische Vierteljahresschrift*, 46(3):432–458, 2005.

## **Book Chapters**

Liam Weeks, Mícheál Ó Fathartaigh, Slava Mikhaylov, and Alexander Herzog. 'More than words': A quantitative text analysis of the treaty debates. In Liam Weeks and Mícheál Ó Fathartaigh, editors, *The Treaty: Debating and Establishing the Irish State*, pages 206–224. Irish Academic Press, 2018.

Kenneth Benoit and Alexander Herzog. Text analysis: Estimating policy preferences from written and spoken words. In Jennifer Bachner, Kathryn Wagner Hill, and Benjamin Ginsberg, editors, *Analytics, Policy and Governance*, pages 137–159. Yale University Press, 2017.

## GRANTS AND AWARDS

2018:

- Clemson's "National Scholars Program Award of Distinction" (awarded by graduating National Scholars to faculty and staff who have served as significant mentors)

2017:

- BMW, Research grant, Analyzing Heterogeneous Sources of Textual Data for Understanding Customer Sentiment (PI), \$50,000
- BMW, Research grant, Natural Language Understanding for Customer Feedback Analysis (PI), \$60,000
- NVIDIA, 2 Tesla P100 GPU for building a deep-learning infrastructure (\$15,000 in-kind)

2016:

- Amazon Web Services (AWS), \$29,300 in-kind grant for cloud computing
- Winner of the Irish Political Studies Best Paper Prize for the 2016 Annual Conference of the Political Studies Association of Ireland (with Liam Weeks, Mícheál O Fathartaigh, and Slava Mikhaylov)
- Irish Research Council New Foundations Scheme (Co-PI; with Liam Weeks and Slava Mikhaylov), *"A quantitative text analysis of the 1921 Anglo-Irish Treaty debates"*, €10,000

2015: Clemson CBBS One Year Accelerate grant (Co-PI; with Jason Thatcher, Ilya Safro, and Linh Ngo), *"Constructing concise and accurate knowledge bases for data-driven social inquiry"*, \$15,921

2013: LSE Seed Fund (PI), £6,085

2012: American Political Science Association Travel Grant

2008: Conference Travel Award, Graduate School of Arts and Science, NYU

2007–2011: Summer Fellowship, Department of Politics, NYU

2006–2011: MacCracken Fellowship, Graduate School of Arts and Science, NYU

## INVITED TALKS

2017:

- Department of Political Science, University of South Carolina
- Rhetorics, Communication, and Information Design (RCID) Research Forum, Clemson University

2015:

- Department of Political Science, Rice University

2014:

- Roundtable participant, "Coordinating electoral and institutional data assets for data-intensive research," Midwest Political Science Association, Chicago, IL
- BMW IT Manager Workshop, BMW IT Research Center, Greenville, SC
- Data Intensive Computing Seminar, Clemson University

2013

- Economics & Politics Seminar, University of Heidelberg
- Mannheim Centre for European Social Research (MZES), University of Mannheim

## SERVICE TO THE PROFESSION

### Conferences

2018:

- Member of the program committee for the 3rd Workshop on Open Science in Big Data (OSBD), held in conjunction with the 2018 IEEE International Conference on Big Data

2017:

- Member of the program committee for the 2nd Southern Data Science Conference (SDSC) in Atlanta
- Member of the program committee for the 2nd Workshop on Open Science in Big Data (OSBD), held in conjunction with the 2017 IEEE International Conference on Big Data

2015: Discussant for panel "Legislative activity and oversight," Midwest Political Science Association, Chicago, IL

2011: Panel organizer "New approaches in coalition research," American Political Science Association, Seattle, WA

### Reviewer

*Journals:* American Journal of Political Science, American Political Science Review, British Journal of Political Science, Comparative Political Studies, European Journal of Political Research, European Political Science Review, International Journal of Social Research Methodology, Journal of Politics, Journal of Systems and Software, Legislative Studies Quarterly, Management Information Systems Quarterly, PLOS One, Political Analysis, Political Science Research and Methods, Politische Vierteljahresschrift, Research and Politics, World Politics

*Books:* Routledge, Wiley

*Grants:* US National Science Foundation, Swiss National Science Foundation

## TEACHING EXPERIENCE

### Clemson University – School of Computing

CPSC 4300/6300 Applied Data Science, BSc/MSc, Spring 2016, 2016/17, 2017/18

CPSC 4910 Senior Design/Capstone Course, BSc, 2016/17, 2017/18

CPSC 4910 Seminar in Professional Issues II, BS/BA, Spring 2017, 2017/18

### London School of Economics

Legislative Politics: European Parliament, MSc, 2013, 2014

European Politics: Comparative Analysis, MSc 2012, 2013

Government, Politics and Public Policy in the EU, BSc, 2012/13, 2013/14

Politics and Institutions in Europe, BSc, 2012/13, 2013/14

### New York University

Comparative Politics, BA, Teaching Assistant, 2010, 2011

Quantitative Methods I-III, PhD level, Teaching Assistant, 2007–09

## STUDENT SUPERVISION

### *Research adviser:*

- Three graduate students in the School of Computing at Clemson University on projects related to data visualization and data-intensive computing, 2015–present.
- Two honors students’ research projects in Computer Science, 2017/18
- Two research interns in the Social Analytics Institute at Clemson University, 2014/15 & 2015/16.
- Three graduate research assistants at LSE for a six-month funded project on legislative behavior in the European Parliament, 2013/14.

*Thesis adviser:* Sixteen master theses in the “Politics and Government in the European Union” program at LSE, 2012–14.

*Academic adviser:* Provided academic guidance and feedback on progress and performance to ten undergraduate students in the “Government and Economics” program at LSE, 2012–14.

## COLLABORATIONS WITH INDUSTRY

LexisNexis Risk Solutions, Atlanta, GA	2015–present
BMW Information Technology Research Center (ITRC), Greenville, SC	2015–present

## LANGUAGES

German (native), English (fluent), French (beginner)

## COMPUTING SKILLS

*Statistical programming languages:* R (+10 years), JAGS (2 years), Stan (1 year)

*Statistical software packages:* Stata (+15 years)

*Programming languages:* Python (+5 years)

*Databases:* MySQL (+5 years)

*Cluster computing and cloud computing:* Clemson University’s Palmetto cluster (3 years), Amazon Web Services (AWS) (2 years)