

C. Ben GIBSON

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INTERESTS: social network dynamics, methodology,
human informant accuracy, organizations,
population hazards and health

EDUCATION

The University of California, Irvine

PhD, Sociology

2018 (exp.). Thesis: *Frontier Problems in Dynamic Social Network Models*

*Masters in
Demographic and
Social Analysis*

2017. Thesis: *Estimating the Population of Active Users on Twitter*

The University of Alabama at Birmingham

*Masters in
Sociology*

2012. Thesis: *Does Homophily Predict Similarities in the Frequency of Heroin Use?
An Analysis of Heroin-Using Dyads*

POSITIONS

Graduate Student Researcher

*UCI Department
of Sociology*

2012-Present

Lab: Networks, Computation, and Social Dynamics

PI: **Carter T. Butts**

Grants worked under:

- *Online Hazard Communication in the Terse Regime: Measurement, Modeling, and Dynamics. NSF CMMI*
- *Statistical Methods for Network Epidemiology. NIH NICHD*

Teaching/Research Assistant

*UAB Department
of Sociology*

2010-2012

Courses: Statistics, Methods

Research Groups: Center for Social Medicine, EMPaCT

AWARDS

- 2017 Outstanding Research Award. University of California, Irvine Department of Sociology.
- 2016 Clifford C. Clogg Award for Best Graduate Student Paper. Methodology Section. American Sociological Association.
- 2015 Robin M. Williams Jr. Paper Award, Department of Sociology, UCI
- 2012-2013 Social Science Tuition Fellowship, UCI
- 2010 Ferris P. and Annie Ritchey Endowed Scholarship in Sociology, Department of Sociology, UAB
- 2010 Dean's Research Award, College of Arts and Sciences, UAB

SKILLS / DATA COLLECTION EXPERIENCE

Software

R, SQL, L^AT_EX, Linux (bash), NVivo. Conversant in SPSS and SAS.

Methods

GLMs, GAMs, *ERGMs, hazard models/survival analysis, machine learning, sampling design, QCA, Bayesian methods

IT

Led management of the lab's computing infrastructure from 2014-2018.

Data Collection

Built a system to collect, store, manage, and regularly query terabytes of social media data from Twitter. Conducted face-to-face interviews in the field. Combed archival records to construct a social network of Post-WWII US Cabinet officials.

PEER-REVIEWED PUBLICATIONS

- 2017 Sutton, J., Vos, S. C., Olson, M. K., Woods, C. W., Cohen, E., **Gibson, C. B.**, Phillips, N., Studts, J., Eberth, J., & Butts, C. T. "Lung Cancer Messages on Twitter: Content Analysis and Evaluation." Accepted to *Journal of the American College of Radiology*.
- 2017 **Gibson, C. Ben** and Timothy B. Mayhall. "Comprehension Context and Sponsor Effects in a Hospital Mental Health Study." Accepted to *Sociological Methods and Research*.
- 2016 Sean M. Fitzhugh, **C. Ben Gibson**, Emma S. Spiro, Carter T. Butts. "Spatio-temporal Filtering Techniques for the Detection of Disaster-related Communication" *Social Science Research*.
- 2015 Sutton, Jeannette, **C. Ben Gibson**, Nolan Edward Phillips, Emma S. Spiro, Cedar League, Britta Johnson, Sean M. Fitzhugh, Carter T. Butts (2015). "Terse Message Retransmission: A Cross-Hazard Analysis of Twitter Warning Messages." *Proceedings of the National Academy of Sciences*.
- 2015 Sutton, Jeannette; **C. Ben Gibson**, Emma S. Spiro, Cedar League, Sean M. Fitzhugh, Butts, Carter T. In Press. "What it Takes to Get Passed On: Message Content, Style, and Structure as Predictors of Retransmission in the Boston Marathon Bombing Response." *PLOS One*.
- 2014 Sutton, Jeannette, Emma S. Spiro, Sean Fitzhugh, Britta Johnson, **C. Ben Gibson**, and Carter T. Butts. "Terse Message Amplification in the Boston Bombing Response." *International Journal of Information Systems for Crisis Response and Management*.
- 2014 Sutton, Jeannette, Emma S. Spiro, Britta Johnson, Sean Fitzhugh, **C. Ben Gibson**, and Carter T. Butts. "Warning Tweets: Serial Transmission of Warning Messages During a Disaster Event." *Information, Communication and Society*.

MANUSCRIPTS UNDER REVIEW

- Under Review* **Gibson, C. Ben** and Burrel Vann Jr.. "The Bootstrapped Robustness Assessment for Qualitative Comparative Analysis." (Re-submitted to *Sociological Methodology*)
- 2016 Clifford C. Clogg Award for Best Graduate Student Paper. Methodology Section. American Sociological Association.
 - 2015 Robin M. Williams Jr Award for Best Graduate Student Paper. Department of Sociology. University of California, Irvine.
- Under Review* **C. Ben Gibson**, Sarah K. Vos, Jeannette Sutton, and Carter T. Butts. "Practical Imputation of Follower Counts of Public Health Twitter Accounts." (Submitted to *Sociological Methods & Research*)
- Under Review* Sarah Vos, Jeannette Sutton, **Gibson, C. Ben** and Carter T. Butts. "Theorizing the Diffusion of Public Health Messages on Social Network Sites." (Re-submitted to *Preventative Medicine*)

PUBLISHED SOFTWARE

- 2015 C. Ben Gibson and Burrel Vann Jr. (2015). braQCA: Robustness assessment for QCA. CRAN. <https://cran.r-project.org/web/packages/braQCA>

SELECTED MANUSCRIPTS IN PROGRESS

- In Progress* Gibson, C. Ben and Carter T. Butts. "The Dynamics of Sexual Partnership Dissolution in the United States"
- In Progress* Gibson, C. Ben and Carter T. Butts. "The Effect of Temporal Adjustments on Dynamic Network Models"
- In Progress* Gibson, C. Ben and Carter T. Butts. "Separable Dynamic Network Logistic Regression."

TEACHING

Instructor	"Truth Be Told: Informant Accuracy in Clinical Mental Health Assessment" (March 2016). Webinar for the Association of Professional Chaplains (APC).
Workshop Assistant	Modeling Relational Event Dynamics with statnet. 34th-36th Sunbelt Conference. Exponential-family Random Graph Modeling (ERGMs) with statnet. 34th-36th Sunbelt Conference.
Lab Instructor	SOCIOLOGY 410: SOCIAL STATISTICS LAB INSTRUCTOR
Lab Instructor	SOCIOLOGY 490: RESEARCH METHODS LAB INSTRUCTOR

PROFESSIONAL CONFERENCE PRESENTATIONS

August, 2016	Gibson, C. Ben, and Carter T. Butts. "Relational Dynamics among Emergency Management Organizations during the Boston Bombing Event." Panel Session, American Sociological Association Conference 2016, Seattle, Washington.
April, 2016	Gibson, C. Ben and Carter T. Butts. "Relational Dynamics between Emergency Management Organizations during a Terrorism Event" Sunbelt Conference XXXVI, Newport Beach, CA.
April, 2016	Yue Yu, Gibson, C. Ben and Carter T. Butts. "Scalable Dynamic Sexual Contact Networks Coefficients Estimation with DNR Structure." Sunbelt Conference XXXVI, Newport Beach, CA.
August, 2015	Gibson, C. Ben, Zack Almquist, and Carter T. Butts. "Scalable Estimation of Temporal ERGMs and DNR Structure from Egocentrically Sampled Data." Panel Session, American Sociological Association Conference 2015, Chicago, Illinois.
August, 2015	Gibson, C. Ben and Burrell Vann Jr. "The Bootstrapped Robustness Assessment for Qualitative Comparative Analysis." Roundtable Discussion, American Sociological Association Conference 2015, Chicago, Illinois.
June, 2015	Gibson, C. Ben and Carter T. Butts. "The Effect of Temporal Adjustments on Dynamic Network Models." Sunbelt Conference XXXV, Brighton, UK.
June, 2015	Nolan Edward Phillips, Jeannette Sutton, Sean M. Fitzhugh, Cedar League, Britta Johnson, Emma S. Spiro, Gibson, C. Ben and Carter T. Butts. "Emergency Management Inter-organizational Networks" Sunbelt Conference XXXV, Brighton, UK.
June, 2015	Yue Yu, Gibson, C. Ben and Carter T. Butts. "How to Know When Your Partner's Sleeping Around: Imputing Concurrency in Dynamic Sexual Contact Networks" Sunbelt Conference XXXV, Brighton, UK.
August, 2014	Sean Fitzhugh, Jeannette Sutton, Carter T. Butts, Emma S. Spiro, C. Ben Gibson, Cedar League, and Britta Johnson "HEROIC: Hazards, Emergency Response, and Online Informal Communications." Research Highlight, Natural Hazards Annual Workshop. Boulder, Colorado.
August, 2014	Sean Fitzhugh, Ben Gibson, Emma S. Spiro and Carter T. Butts. <i>Did You Feel it? Spatial Filtering Techniques for Detection of Local Disaster Events.</i> American Sociological Association: Section on Mathematical Sociology, San Francisco, California.
February 2014	C. Ben Gibson, Yue Yu, Zack Almquist, and Carter T. Butts. <i>Scalable Estimation of Temporal ERGMs with DNR Structure from Egocentrically Sampled Data.</i> Sunbelt Conference, St. Pete Beach, FL.
August 2013	Jeannette Sutton, Emma Spiro, Britta Johnson (presenter), Sean Fitzhugh, C.

- Ben Gibson, and Carter T. Butts. *Warning Tweets: Serial Transmission of Warning Messages During a Disaster Event* American Sociological Association, New York.
- August 2013 C. Ben Gibson, Emma Spiro, Sean Fitzhugh and Carter T. Butts. *Findings from Measuring Online Social Networks Dynamics: the Local Is Global*. American Sociological Association, New York.
- June 2013 C. Ben Gibson, Emma Spiro, Sean Fitzhugh, and Carter T. Butts. *Estimating Active User Population Dynamics in Online Social Networks*. Sunbelt Conference, Hamburg.
- June 2013 Sean Fitzhugh, C. Ben Gibson, and Carter T. Butts. *Extended Brokerage Structures in Organizational Networks: A Model-Driven Approach* Sunbelt Conference, Hamburg.
- August 2012 C. Ben Gibson. *Online Social Networks (OSNs) and the Possibility of Representative Snowball Sampling*. American Sociological Association. Denver.
- March 2012 C. Ben Gibson. *Hyperbolic Theory and the Idea-Construction of Reality*. Southern Sociological Association. New Orleans.
- March 2011 C. Ben Gibson. *Rich Friends, Healthy Mind? Peer Income and Mental Health among Older Adults*. Southwest Sociological Association. Las Vegas.
- April 2010 C. Ben Gibson. *Elite Networks and the Political Survival of US Cabinet Members*. Southern Sociological Association. Atlanta.
- June 2009 R. Corbetta and C. Ben Gibson *Revolving Doors and Foreign Policy Collective Decision-Making: A Network Analysis*. Harvard Political Networks Conference. Boston.