

EMILY J. SMITH

THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

CONTACT INFORMATION

Department of Mathematics
434 Chapman Hall
Campus Box 3250
Chapel Hill, NC 27599-3250

web: emilyjsmith.net
email: ejsmith4@email.unc.edu

ACADEMIC POSITIONS

Postdoctoral Research Associate
University of North Carolina, Chapel Hill, NC
Department of Mathematics
PI: Professor Peter J. Mucha

2018 - Present

EDUCATION

Ph.D., Sociology
University of California, Irvine, CA
Dissertation: The Geography and Multiplexity of Personal Networks
Committee: Carter T. Butts, Katherine Faust, John R. Hipp

2018

M.S., Statistics
University of California, Irvine, CA

2017

M.A., Sociology
University of California, Irvine, CA
Thesis: Understanding the Job Lead Ties of Los Angeles Residents
Committee: Carter T. Butts, Katherine Faust, Matthew Huffman

2015

B.S., Sociology
Linfield College, McMinnville, OR

2012

B.S., Mathematics
Linfield College, McMinnville, OR

2012

RESEARCH INTERESTS

Social network analysis, space and geography, mathematical sociology, gender, inequality, quantitative sociology

ARTICLES & PEER-REVIEWED CONFERENCE PAPERS

Boessen, A., Hipp, J.R., Butts, C.T., Nagle, N.N. & **Smith, E.J.** (2017). Social fabric and fear of crime: Considering spatial location and time of day. *Social Networks*. 51: 60-72.

Boessen, A., Hipp, J.R., Butts, C.T., Nagle, N.N., & **Smith, E.J.** (2017). The built environment, spatial scale, and social networks: Do land uses matter for personal structure? *Environment and Planning B: Urban Analytics and City Science*. 1-17.

Smith, E.J., Marcum, C.S., Boessen, A., Almquist, Z.W., Hipp, J.R., Nagle, N.N., & Butts, C.T. (2015). The Relationship of Age to Personal Network Size, Relational Multiplexity, and Proximity to Alters in the Western United States. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, 70(1): 91-99.

Boessen, A., Hipp, J.R., **Smith, E.J.**, Butts, C.T., Nagle, N.N., & Almquist, Z. (2014). Networks, Space, and Residents' Perceptions of Cohesion. *American Journal of Community Psychology*, 53: 447-461.

Gjoka, M., **Smith, E.J.**, & Butts, C.T. (2014). Estimating Clique Composition and Size Distributions from Sampled Network Data. In *Proceedings of First IEEE International Workshop on Network Science For Communication Networks*.

ARTICLES UNDER REVIEW	Smith, E.J., Butts, C.T., Hipp, J.R., & Nagle, N.N. Predicting respondent precision of geographic locations. <i>Public Opinion Quarterly</i> . (Submitted).
WORKING PAPERS	Smith, E.J., Almquist, Z.W., Boessen, A., Butts, C.T., Hipp, J.R., & Nagle, N.N. <i>The geography and multiplexity of job lead ties</i> . Smith, E.J., Butts, C.T., Hipp, J.R., & Nagle, N.N. <i>Spatial and social embeddedness of emergency contact ties</i> .
TECHNICAL REPORTS	Austin, J., Smith, E.J., Srinivasan, S., Sanchez, F.A. (2011). <i>Social Dynamics of Gang Involvement: A Mathematical Approach</i> . MTBI Technical Report: MTBI-08-08M.
CONFERENCE PRESENTATIONS	Smith, E.J., Kane, J.B., Butts, C.T., Hipp, J.R., Farshchi, E. (June, 2018). "Local Social Network Ties and Prenatal Smoking." 38th International Sunbelt Network Conference (INSNA), Utrecht, Netherlands. Smith, E.J., Butts, C.T., Hipp, J.R., & Nagle, N.N. (August, 2017). "Geography and Multiplexity of Job Lead Ties." American Sociological Association Annual Meeting, Montreal, Quebec, Canada. Smith, E.J., Butts, C.T., Hipp, J.R., & Nagle, N.N. (July, 2017). "Spatial and Social Embeddedness of Emergency Contact Ties." 1st North American Social Networks Conference, Washington D.C. Smith, E.J., Butts, C.T., Hipp, J.R., & Nagle, N.N. (August, 2016). "Predicting Respondent Precision of Geographic Location." American Sociological Association Annual Meeting, Seattle, WA. Smith, E.J., Butts, C.T., Hipp, J.R., & Nagle, N.N. (April, 2016). "Predicting Respondent Precision of Geographic Location." 36th International Sunbelt Network Conference (INSNA), Newport Beach, CA. Smith, E.J., Marcum, C.S., Boessen, A., Almquist, Z.W., Hipp, J.R., Nagle, N.N., & Butts, C.T. (August, 2014). "The Relationship of Age to Personal Network Size, Relational Multiplexity, and Proximity to Alters in the Western United States." American Sociological Association: Section on Aging and the Life Course Roundtables, San Francisco, CA. Smith, E.J., Marcum, C.S., Boessen, A., Almquist, Z.W., Hipp, J.R., Nagle, N.N., & Butts, C.T. (February, 2014). "The Relationship of Age to Personal Network Size, Relational Multiplexity, and Proximity to Alters in the Western United States." 34th Sunbelt Network Conference (INSNA), St. Pete Beach, FL. Yu, Y., Smith, E.J., & Butts, C.T. (February, 2014). "Retrospective Network Imputation from Life History Data: the Impact of Designs." 34th Sunbelt Network Conference (INSNA), St. Pete Beach, FL. Gjoka, M., Smith, E.J., & Butts, C.T. (February, 2014). "Design-Based Estimators for Attribute-Labeled, Low Semidiameter Subgraphs." 34th Sunbelt Network Conference (INSNA), St. Pete Beach, FL. Smith, E.J., Almquist, Z.W., Boessen, A., Butts, C.T., Hipp, J.R., & Nagle, N.N. (August, 2013). "Understanding the Job Lead Ties of Los Angeles Residents." American Sociological Association: Section on Mathematical Sociology Paper Session, New York, NY. Smith, E.J., Almquist, Z.W., Boessen, A., Butts, C.T., Hipp, J.R., & Nagle, N.N. (May, 2013). "Understanding the Job Lead Ties of Los Angeles Residents." 33rd Sunbelt Network Conference (INSNA), Hamburg, Germany.

RESEARCH
EXPERIENCE

Graduate Student Researcher

2012 - 2018

*PI: Carter T. Butts, Departments of Sociology and Statistics
University of California, Irvine, CA*

Student Researcher

Summer 2011

*Mathematical & Theoretical Biology Institute
Director: Carlos Castillo Chavez, Professor of Mathematical Biology
Arizona State University, Tempe, AZ*

FELLOWSHIPS &
AWARDS

Graduate Student Fellow

2012 - 2018

*Center for Networks and Relational Analysis
University of California, Irvine, CA*

TEACHING
EXPERIENCE

Instructor: Short Courses

- Introduction to Data Analysis with R (Fall 2017, Winter 2018, Spring 2018), Data Science Initiative, University of California, Irvine.
- Introduction to R (Spring 2016, Fall 2016, Winter 2017, Spring 2017), Data Science Initiative, University of California, Irvine.

Teaching Assistant

- Chemical and Materials Physics (ChaMP) Summer Program (September 2015). School of Physical Sciences, University of California, Irvine.

Workshop Assistant

- Introduction to Modeling Temporal (dynamic) ERGMs using statnet (June 2018). 38th Sunbelt Conference, Utrecht, Netherlands.
- Valued Tie Network Modeling with statnet (June 2018). 38th Sunbelt Conference, Utrecht, Netherlands.
- Modeling Relational Event Dynamics with R and statnet (June 2018). 38th Sunbelt Conference, Utrecht, Netherlands.
- Intro to Exponential family Random Graph Models (ERGMs) for Social Networks (July 2017). 1st North American Social Networks Conference, Washington D.C.
- Intro to Temporal ERGMs (TERGMs) for Dynamic Social Networks (July 2017). 1st North American Social Networks Conference, Washington D.C.
- Analyzing Egocentrically Sampled Network Data Using ERGMs and TERGMs (July 2017). 1st North American Social Networks Conference, Washington D.C.
- Introduction to Social Network Analysis with R and statnet (April 2016). 36th Sunbelt Conference, Newport Beach, CA.
- Moving beyond Descriptives: Basic Network Statistics with statnet (April 2016). 36th Sunbelt Conference, Newport Beach, CA.
- Modeling Relational Event Dynamics with statnet (April 2016). 36th Sunbelt Conference, Newport Beach, CA.
- Valued Network Modeling with statnet (April 2016). 36th Sunbelt Conference, Newport Beach, CA.
- Modeling Relational Event Dynamics with statnet (February 2014). 34th Sunbelt Conference, St. Pete Beach, FL.
- Moving Beyond Descriptives: Basic Network Statistics with statnet (February 2014). 34th Sunbelt Conference, St. Pete Beach, FL.
- Exponential-family Random Graph Modeling (ERGMs) with statnet (February 2014). 34th Sunbelt Conference, St. Pete Beach, FL.
- Modeling Relational Event Dynamics with statnet (May 2013). 33rd Sunbelt Conference, Hambury, Germany.
- Exponential-family Random Graph Modeling (ERGMs) with statnet (May 2013). 33rd Sunbelt Conference, Hambury, Germany.

- Valued Network Modeling with statnet (May 2013). 33rd Sunbelt Conference, Hambury, Germany.

SERVICE

Peer Reviewer

- American Sociological Review

Student Representative to the Mathematical Sociology Section of ASA **2016 - 2017**

PROFESSIONAL
MEMBERSHIPS

American Sociological Association (ASA)

- Section on Mathematical Sociology

International Network for Social Network Analysis (INSNA)