DR. RYAN BURGE

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QUALIFICATIONS SUMMARY

- Academic experience with social science statistics, survey construction, and data collection
- Expertise in all forms of regression analysis (including logistic, OLS, and two stage least squares), descriptive statistics, and visualizations in R (ggplot2, ggvis, plotly, Shiny apps)
- Experience in various forms of machine learning including kmeans clustering and random forest classification models
- Additional work in social network scraping and analysis (Twitter, Facebook) as well as text analysis and dealing with large unstructured datasets
- Core competencies in: SPSS, Stata, R, SQL, Excel, Latex

EDUCATION

Southern Illinois University - Carbondale   August 2005 – August 2011
PhD in Political Science
Greenville College   August 2000- May 2004
Bachelor of Arts in History/Political Science, Cum Laude

RECENT WORK EXPERIENCE

Director of Quantitative Analysis: Janus Analytics, LLC   July 2015-Present
Managing a team of highly educated, well-informed policy analysts who seek to influence the creation and implementation of effective public policy and meaningful programming. We believe that in order to make responsible decisions, rigorous data collection and analysis are essential. Janus Analytics specializes in providing world-class research, data management, program evaluation, and policy analysis with a focus on customer service. Ultimately, we envision a sustainable system of policy and practice.

- Worked with the University of South Carolina-Upstate to develop a survey instrument that was created and distributed through Qualtrics. Completed project included a qualitative on-site analysis of the program as well as a quantitative analysis of survey respondents using R and Excel.
- Working with the Sandusky State Theatre to develop lobbying materials to persuade lawmakers to relax laws regarding alcohol sales
- Generated a number of examples of statistical analysis on my personal portfolio which includes visualizations in both ggplot2 and ggvis, Shiny app construction, plot.ly interactive visuals, kmeans clustering, text analysis, social media scraping and working with large datasets from the Affordable Care Act. These can be found at ryanburge.github.io

Instructor of Political Science: Eastern Illinois University   August 2012-Present
Taught a number of courses in American government and public administration at the graduate and undergraduate level. Taught research methods to both undergraduate and graduates students using R + R Studio. In addition, worked collaboratively with a number of graduate assistants to advance my research agenda and result in the publication of peer-reviewed articles.

- Published a number of articles in highly selective social science journals including the *Journal for the Scientific Study of Religion* (15% acceptance rate), as well as the *Review of Religious Research*, *Politics & Religion*, and the *Journal of Religious Leadership*. Used statistical tools such as SPSS and Stata to analyze data collected through the Qualtrics platform. Analysis techniques included multivariate regression, predicted probabilities, propensity score matching, hypothesis testing and confidence intervals, factor analysis
- Supervised a number of master's thesis projects including a project by a graduate student that used GIS mapping to track marijuana tax revenue sales in the state of Colorado.
- Member of the Recruitment Committee, which included trips to local high schools and colleges to educate them about programs available at EIU. Final AY at EIU saw a 50% increase in undergraduate majors.
- Received a "Superior" Rating for each of the years employed

Post-Doctoral Fellow: Paul Simon Public Policy Institute   August 2011 – May 2012
Was brought on as an advisor in the areas of survey construction and analysis as well as Illinois and national political concerns.
- Worked with Institute staff to develop two separate polls, one for the entire state of Illinois, and a second for just the 20 most southern counties in the state
- Wrote survey questions, focused on question ordering issues, and topics to be covered in each poll
- Wrote a number of reports for the Policy Institute using data collected from the polls conducted, these include:
  - "The Movement of Opinion Toward Spending Cuts, Revenue Increases, and Political Reform In Illinois: Results and Analysis of The Fourth Annual Simon Poll"
  - "Demographic and Religious Support for Reform Proposals in the State of Illinois"
- Provided a lecture during the Simon Institute's "Pizza and Politics" Forum on the role of religion in the 2012 Presidential Campaign.

SELECTED PUBLICATIONS

- Burge, Ryan P. and Paul A. Djupe. 2016**. "And Who Do You Say I Am?: Perceptions of the Emergent Church by Clergy."** *Journal for the Scientific Study of Religion***.**
- Burge, Ryan, Paul A. Djupe and Brian Calfano**. 2016. "The Delegational Pulpit? Clergy Identifying as Congregational Political Representatives."** *Representation*. 52(1): 43-69.
- Burge, Ryan P. and Paul A. Djupe. 2016. **"Emergent Fault Lines: Clergy Attitudes Toward the Emergent Church Movement."** *Journal of Religious Leadership*. 15(1): 5-30**.**
- Burge, Ryan, Paul A. Djupe and Brian Calfano**. 2015. "The Political Tolerance of Clergy and its Democratic Roots."** In *Religion and Political Tolerance in America: Advances in the State of the Art***.** ed. Paul Djupe. Temple University Press, 21-33.
- Burge, Ryan P. and Paul A. Djupe. 2015. **"Emergent Church Practices in America: Inclusion and Deliberation in American Congregations"** *Review of Religious Research* 57(1): 1-22**.**
- Burge, Ryan and Paul Djupe. 2014**. "Truly Inclusive or Uniformly Liberal: An Analysis of the Politics of the Emerging Church."** *Journal for the Scientific Study of Religion***.** 53(3): 636-651**.**

- Burge, Ryan. 2013. **"Using Matching to Investigate the Relationship Between Religion and Tolerance."** *Politics & Religion*. 6(2): 264-281.

RESEARCH PROJECTS
- Mapping Slot Matching Slot Machine Revenues in March 2017 – Using data from the Illinois Gaming Board and scraping a table from Wikipedia to determine which cities gamble the most per capita in Illinois. Created a leaflet interactive map with popup functionality.
- 44 Years of Religion and Politics in One Graph. Using the General Social Survey, created a graph that visualized 44 years of party identification for each of the seven major religious traditions in the U.S. In addition, I created a Shiny app which allows users to choose a tradition, as well as a year, and a histogram will be plotted of the party identification of that selection.
- How Do Presidents Handle Prayer Breakfasts? Obama Talked A Lot. Created a database of all presidential prayer breakfast addresses going back to 1971. Using text analysis to determine who spoke the most. Also conducted sentiment analysis and generated comparison word clouds of Obama's speech vs. Trump's speech.
- "Can an Algorithm Correctly Classify Evangelicals? Most of the time, yes." Used decision tree analysis to attempt to determine if respondents to the General Social Survey were evangelical Protestants. Achieved a 79% success rate.
- "Hipster Baby Names" – An analysis of social security administration baby names over the last 130 years. This post was chosen as "Kernel of the Week" on Kaggle. Uses dplyr, ggvis.
- A series of 3 posts on analysis of the Affordable Care Act including "ACA and Chemotherapy", "State Ideology and Health Care" and "Max out of Pocket in the ACA" which analyzing the ACA database which substantial in size and requires extensive data cleaning. Posts include ggplot2, choropleth maps, linear regression analysis.
- "Predicting LGBT Rights" – A post that included extracting data from websites which score each state in regard to how much they support the rights of LGBT individuals. This post includes choropleth maps, regression analysis, and the creation of a Shiny app.
- "Are Left Handed Pitchers Worth More?" – Using the last ten years of baseball statistics I try to determine if left handed pitchers are paid more than their right handed counterparts. This post includes ggplot2, dotwhisker plots of regression analysis, and an example of an advanced statistical technique called coarsened exact matching.
- "Scraping Twitter" – This post is tracking the use of a hashtag on Twitter (#FundEIU) and how the usage of that hashtag has changed over time. This post includes examples of using the Twitter API, as well as doing text analysis, creating a word cloud, ggplot2, as well as using sentiment analysis on the tweets in the dataframe.
- "Clustering Evangelicals" – using the technique of kmeans clustering I extract evangelicals from the General Social Survey and then place them into three generations to compare how their opinions and actions are different. I am working with a prominent evangelical leader to get this analysis placed onto a well read website.
- "How does Trump speak to evangelicals?"- Using the transcript of Donald Trump's recent conversation with evangelical leaders I conducted a number of analyses on both Trump's words as well as those in the audience. This analysis was featured on the "Corner of Church and State" blog under the title "Six words Trump never said to evangelicals." This post includes word clouds, ggplot2, and sentiment analysis.