

# Ryan Wesslen

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## EDUCATION

### University of North Carolina at Charlotte

- Ph.D. Candidate in Computing & Information Systems Aug 2016 – Present
  - Concentration: Computer science
  - Research Areas: Computational social science, text-as-data, visual analytics, cognitive science.
- M.S. in Data Science & Business Analytics Aug 2014 – May 2016

### New York University

- M.A. in Economics Aug 2007 – May 2011

### North Carolina State University

- M.S. in Financial Mathematics May 2008 – Aug 2009

### University of North Carolina at Chapel Hill

- B.A. in Economics (Highest Honors), Minor in Mathematics Aug 2003 – May 2007
- Thesis: “An Endogenous Dynamic General Equilibrium Model of Fertility for England 1881-1931” (pdf)

## PROFESSIONAL EXPERIENCE

### Publicis Hawkeye, Data and Analytics Group

- Senior Marketing Analyst Jun 2014 – Jun 2015
  - Terminix: End-to-end marketing analytics for direct (DM & Email), digital (SEO & SEM) and partner channels.
  - Bank of America: Lead generation strategy from web behavior analytics for loan, deposit and brokerage products.
  - LG: Email targeting model and strategy for product registration.

### Bank of America, Dealer Financial Services Retail Analytics and Modeling

- Vice President, Consumer Product Strategy Analyst III Aug 2013 – Jun 2014
  - Credit scorecard acquisition modeling for \$20BN+ auto, marine, RV and aircraft lending business.

### Bank of America, Small Business Credit Risk Governance

- Assistant Vice President, Risk Analysis Senior Specialist Jun 2011 – Aug 2013
  - Credit risk management for \$10BN+ small business card account management, risk detection, payment, stimulation and retention strategies.

### Bank of America, Global Risk Management Associate Program

- Global Risk Management Associate Jun 2009 – Jun 2011
  - Two year rotational management program within the Global Risk organization.
  - Counterparty credit exposure modeling for multiple derivative asset classes (equity, FX, credit, rates, commodities).
  - Credit risk reporting & analytics for US Consumer Card, Small Business, Europe and Practice Solutions portfolios.

## PUBLICATIONS

### PEER REVIEWED

- G. Banks, H. Woznyj, R. Wesslen, K. Frear, G. Berka, H. Gordon, and E. Heggstad. “Strategic Recruitment Across Borders: An Investigation of Multinational Enterprises,” *Journal of Management*, Aug 2018. (pdf)
- S. Levens, O. Eltayeb, B. Aleshire, S. Nandu, T. Gallicano, R. Wesslen, and S. Shaikh. “Using Information Processing Strategies to Predict Contagion of Social Media Behavior: A Theoretical Model,” *In 9th International Conference on Applied Human Factors and Ergonomics (AHFE 2018)*, Jul 2018. (pdf)
- A. Karduni, R. Wesslen, S. Santhanam, I. Cho, S. Volkova, D. Arendt, S. Shaikh, and W. Dou. “Can You Verifi This? Studying Uncertainty and Decision-Making about Misinformation in Visual Analytics,” *In 12th International AAAI Conference of Web and Social Media (ICWSM)*, Jun 2018. (16% Acceptance Rate) (pdf) (GitHub)
- R. Wesslen, S. Nandu, O. Eltayeb, T. Gallicano, S. Levens, M. Jiang, and S. Shaikh. “Bumper Stickers on the Twitter Highway: Analyzing the Speed and Substance of Profile Changes,” *In 12th International AAAI Conference of Web and Social Media (ICWSM, short paper)*, Jun 2018. (pdf) (GitHub)

- G. Banks, H. Woznyj, R. Wesslen, and R. Ross, “A Review of Best Practice Recommendations for Text Analysis in R (and a User Friendly App),” *Journal of Business and Psychology*, Jan 2018. (pdf) (GitHub) (Dataverse)
- I. Cho, R. Wesslen, A. Karduni, S. Santhanam, S. Shaikh, and W. Dou, “The Anchoring Effect in Decision-Making with Visual Analytics,” *In Visual Analytics Science and Technology (VAST), 2017 IEEE Conference*, Oct 2017. (pdf) (GitHub)
- I. Cho, R. Wesslen, S. Volkova, W. Ribarsky, and W. Dou, “CrystalBall: A Visual Analytic System for Future Event Discovery and Analysis from Social Media Data,” *In Visual Analytics Science and Technology (VAST), 2017 IEEE Conference*, Oct 2017. (pdf)
- R. Wesslen, T. Gallicano, J.C. Thill, and S. Nandu, “Hot issue publics on Twitter: Analyzing Charlotte protests with computer-assisted text analysis,” *In 2017 International Conference on Computational Social Science (IC2S2)*, Jul 2017. (presentation)
- T. Gallicano, R. Wesslen, and J.C. Thill, “From cluster tweets to retweets: A big data, rhetorical exploration of digital social advocacy in the context of the Charlotte protests on Twitter,” *In Proceedings of 2017 International Public Relations Research Conference*, Mar 2017. (pdf)

#### WORKING PAPERS

- R. Wesslen, “Computer-Assisted Text Analysis for Social Science: Topic Models and Beyond,” Mar 2018. (pdf)
- R. Wesslen, S. Santhanam, A. Karduni, I. Cho, S. Shaikh, and W. Dou. “Investigating Effects of Visual Anchors on Decision-Making about Misinformation,” Sep 2018.
- A. Karduni, I. Cho, R. Wesslen, S. Santhanam, S. Volkova, D. Arendt, S. Shaikh, and W. Dou. “Vulnerable to Misinformation? Verifi!” Oct 2018.
- D. Arendt, E. Saldanha, R. Wesslen, S. Volkova, and W. Dou. “Towards Rapid Interactive Machine Learning: Evaluating Tradeoffs of Classification without Representation,” Sep 2018.

#### RESEARCH EXPERIENCE

##### **Pacific Northwest National Laboratory**, Analysis in Motion Initiative

- Research Assistant (with W. Dou) Jul 2017 – Present
  - Research collaboration with two PNNL researchers (S. Volkova and D. Arendt) on misinformation in social media using natural language processing, visual analytics, and image recognition.

##### **University of North Carolina at Charlotte**, Project Mosaic

- Research Assistant Jan 2016 – Dec 2017
  - Research collaborations with faculty in management, communications, geography, and organizational science.
  - UNCC faculty co-authorship and research abstract analysis with topic modeling and social network analysis.

##### **University of North Carolina at Charlotte**, Data Science Initiative

- Research Assistant Jan 2016 – May 2017
  - Management of GNIP Twitter firehose and providing 15+ faculty and graduate students data access.
  - Tutorials and one-on-one guidance for faculty and researchers to analyze social media.

#### TEACHING EXPERIENCE

##### **University of North Carolina at Charlotte**, Project Mosaic & Data Science Initiative

- Guest Lectures on Visualizations in R for DSBA 5122 (Visual Analytics) Sep 2016 – present
  - Two part guest lectures for Visual Analytics course for my advisor’s ongoing course.
- Summer 2018 Interactive Visualizations with RStudio Workshop (GitHub) Jul 2018 – Aug 2018
  - Three part workshop series for UNCC Data Science students to learn RStudio interactive visualizations using tidyverse, Shiny, and htmlwidgets.
- Fall 2017 Workshops in Computational Social Science with R (GitHub) Aug 2017 – Dec 2017
  - Ten week workshop series in computational social science.
  - R fundamentals, tidyverse, visualizations, social media, machine learning, social networks, and text-as-data.
- Summer 2017 Social Media Workshop Series (GitHub) Jul 2017
  - Day 1: Social media acquisition (Twitter, Facebook).
  - Day 2: Data querying, visualizations, and social networks.
  - Day 3: Text-as-data (classification, topic modeling, word embedding).
- Summer 2017 Faculty R Bootcamp (GitHub) (with K. Venkitasubramanian and P. Jung) Jun 2017
  - Two day workshop on data management, visualizations, and statistical modeling in R.
- Spring 2017 Workshops Jan 2017 – May 2017
  - Introduction to Topic Modeling with R (March 2017) (GitHub)

- Accessing Twitter datasets on SOPHI with PySpark and Spark SQL (Feb 2017)
- Two Part Seminar Series: Social Media Data for Social Science Faculty (April 2017) (Part1) (Part2)
- Fall 2016 Workshops Aug 2017 – Dec 2017
  - Twitter Data Acquisition via Twitter's Public API and R (Oct 2016)
  - Three day workshop on Twitter Text Analytics for Social Sciences (Sept 2016) (GitHub)
- Spring 2016 Workshops Jan 2017 – May 2017
  - Twitter Analytics for Social and Health Sciences (April 2016).
  - Text Mining Analytics for Social Science Research with R (March 2016)

**University of North Carolina at Chapel Hill, Department of Economics**

- Undergraduate Teaching Assistant for Economics 101. Aug 2005 – May 2007
  - Lead nightly review sessions for 30+ students.
  - Lead recitation section reinforcing lecture, quiz and test materials.

**AWARDS**

- 2017 International Public Relations Research Conference (with T. Gallicano and J.C. Thill). Mar 2017  
Boston University Award for Top Paper in Public Relations and the Social & Emerging Media.
- 2016 International Computational Social Science Conference (with N. Sircar and Z. Fu) Jun 2016  
2nd place in Datathon: "U.S. Election 2016: An Outsider's Cycle?"
- University of North Carolina at Chapel Hill May 2007  
Chancellor's Award for 2006-2007 UNC Chapel Hill Undergraduate Prize in Economics.

**PROFESSIONAL  
AFFILIATIONS**

**Global Association of Risk Professionals (GARP),**

- Certified Financial Risk Manager Program (FRM) 2011 – Present

**SKILLS**

R / R Studio (tidyverse), RMarkdown, Shiny, Git, Python, PySpark, Word/Excel/PowerPoint, Docker, UNIX, Linux/Ubuntu, SQL, SAS (Base/EG/Jmp), Matlab, C++, STATA, EViews.