Dedicated, life-long learner. Always looking for questions and answers in the data. Known as a highly organized, perceptive, and resourceful team player. Passionate about the R community.

## **Programming Experience**

- 3 years using SQL to query large (>10,000,000 rows) data sets and compile insightful reports for company management
- 2 years of experience using R for data science and data viz
- 2 years of experience building static and interactive reports with R Markdown and R Shiny
- Front-end and back-end university classes in C++ and Python
- Author and maintainer of the edgedata R package on CRAN
- Familiarity with HTML, CSS, Javascript, Git, JSON, XML, C, Linux, and Multipass
- Advanced Excel/VBA development

## Work Experience \_\_\_\_\_

Actuarial Analyst, R Developer. BlueCross & BlueShield of Mississippi. Flowood, MS. June 2017 – Present

- Go-to analyst for data requests from the CFO and CEO. This often requires custom data visualizations and analysis, and it always requires clear communication of technical concepts.
- Created a complex R Shiny application to track the performance of a predictive model over time. Included an optimized SQL back-end, insightful visualization, and data caching to optimize response time.
- Daily code review given and received. Reviewing for both technical accuracy and business value.
- · Author and maintainer of an internal R package to safely interact with the company's database
- Passionate about coding best practices, peer review, and careful version control
- Developed an understanding of many machine learning techniques and their real world applications

Actuarial Student Intern. BlueCross BlueShield of Mississippi. Flowood, MS. May 2016 - August 2016

- Capstone project involved building member risk profiles with diagnosis codes and searching for suspected missing codes
- Built a new predictive model with SQL and Excel to capture undercoding in membership

## Education

Bachelor of Science in Mathematics. Minor in Computer Science. Mississippi State University, Starkville, MS. GPA 3.92/4.00. May 2017

- Passed actuarial exams P, FM, IFM, SRM, and LTAM
- Split-level front-end design class using Python and PyQt to design a real-use interface for Fedex

## Research Experience\_

Undergraduate Research Project in Graph Theory. Mississippi State University. August 2015-December 2015

- Worked with the independence polynomials of claw free graphs and trees
- Paper available here: https://osebje.famnit.upr.si/~russ.woodroofe/ethan-brockmann.pdf