

## Experience

Data Scientist, November 2020-Present  
*Aspirus Health, Wausau, WI*

- Created an ETL process in Qlik Sense to process raw data files and achieve centralized, standardized, and readily access to insights from the Vizient Clinical Database
- Developed R Shiny applications to explore "what-if" scenarios, identify areas of improvement, and assess financial impact on Quality programs
- Built analyses in R Markdown to provide annotated, reproducible data stories around key clinical measures

Advanced Analytics Modeler, December 2019-October 2020  
*Sentry Insurance, Stevens Point, WI*

- Built a text mining tool in Python's spaCy framework to extract patterns from claim notes
- Integrated producer activity text data into predictive (ML) models to enhance prospect prioritization
- Created Tableau dashboards to explore geographic impact of pricing models and underwriting issues
- Wrote SQL queries in SAS to extract data from various sources and build analysis datasets

Biostatistician, June 2017-December 2019  
*Cleveland Clinic, Cleveland, OH*

- Built, automated, and operationalized a predictive model to identify patient's at high risk for appointment no-show
- Developed R Shiny web applications to implement risk prediction models for clinical use
- Wrote SQL queries to extract EHR data utilizing the UMLS
- Consulted with pharmaceutical companies on EHR-based health outcomes research projects

## Skills

### General

Concurrent project management, communication of project specifications and results, automating processes/workflows, collaboration and leadership

### Technical

R (tidyverse, ggplot, shiny, H2O); SQL; Python (pandas, spaCy); QlikSense; Java; data cleaning, manipulation, visualization; building statistical workflows; text analysis, regular expressions

### Methodology

Regression modeling (GLM's, GEE's, mixed models), survival analysis, machine learning (random forest, gradient boosting machines, neural networks), natural language processing (NLP)

## Education

M.S. in Statistics, 2017  
*University of Iowa  
Iowa City, IA*

- Major GPA: 3.93

B.S. in Statistics, 2015  
*UW-La Crosse  
La Crosse, WI*

- Major GPA: 3.91
- Minor: Computer Science

### Projects

- R package for Naive Bayes' document classification with Java backend
- Gibbs' sampler in Python
- Custom database language in Java with a hash index and random access files

### Coursework

applied statistics, statistical inference, computer intensive statistics, machine/statistical learning, model selection, sports statistics, bayesian statistics, applied time series, nonparametric statistics, categorical data analysis, database management, software design (Java), calculus I-III, linear algebra