# Experience

#### CVS Health, Woonsocket, RI

### Data Scientist, Machine Learning Team // January 2018 - Present

- Develop machine learning models for Minute Clinic scheduling optimization.
- Project planning, development, documentation and communication with Minute Clinic business partners and across the CVS organization.
- Facilitate the transition of modeling and data to Hadoop, increasing efficiency and reducing model run times.
- Operational machine learning models through pilot testing and validation.

### Lincoln Financial Group, Hartford, CT

### Data Scientist // December 2016 - January 2018

- Developed and implemented Machine Learning algorithms for data driven cross sell and customer retention business activities in Python and R.
- Led the initiation of AWS EC2 computing capabilities to expand intensive computing capabilities for data science team.
- Advanced data science around processes and systems within the organization by extracting knowledge or insights from data in various forms, either structured or unstructured
- Identified, analyzed, and interpreted current & emerging developments/business trends, and presented information to management.
- Collaborated with IT & other stakeholders to evaluate current state of data; supported the development
  of tactical plans to improve data management and resolve technical challenges impeding data availability,
  quality, metric consistency and credibility
- Supported the development & implementation of a business analytic framework to include forward-looking metrics and insights.

## State of Montana, Dept. of Revenue, Bozeman, MT

### Statistical Modeler // August 2014 – August 2016

- Provided technical expertise by developing, specifying and calibrating multivariate regression models for mass appraisal of residential and commercial properties in SAS and R.
- Conducted independent data analysis projects on economic market trends, spatial correlation, time trends, data segmentation and clustering in R.
- Developed and presented effective data visualization, reports, and presentations, using R Studio Markdown Reports, ggplot2 in R, SAS, ArcGIS, Python, Microsoft Excel Pivot Tables, Microsoft Office Suite.
- Implemented improved methods for data analysis steps, improving overall process efficiency and effectiveness of market response models.
- Analyzed and reported on the performance of statistical models used within the department.

## Montana State University, Bozeman, MT

## Machine Learning Research Assistant // June 2011 - August 2014

- Applied a Random Forest classification to multi-source, multi-temporal, spatial data in R.
- Implemented a multi-resolution wavelets change detection analysis in R and Matlab.
- Completed an uncertainty analysis of image data via a Monte Carlo simulation in R and Matlab.

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- Explored the efficacy of Information theory in image scale integration and image de-blurring.
- Developed and collaborated on peer-reviewed manuscript publications and professional presentations, including writing, editing, data visualization, and maps.
- Managed project logistics for multiple projects including transport and installation of scientific
  equipment and data collection by student researchers in remote environments of Montana and Alaska.
- Provided a multitude of graduate students with statistical and spatial analyses assistance; including project development, interpretation of results and writing data processing code.

### Red Castle Resources, INC, Salt Lake City, UT

Remote Sensing Data Scientist // May 2010 – May 2011

- Implemented classification of stacks of spatial data using a support vector machine algorithm in Python and Erdas Imagine; drafted associated documentation and performed accuracy assessments on results.
- Data acquisition and organization of over 10 Tb of data.
- Used SQL to query, edit, and download data.
- Performed a comparative analysis of Random Forest classification and maximum likelihood supervised classification techniques in R and orange.
- Developed and presented a cohort of data classification courses for resource managers.
- Provided geospatial analysis project development support to USDA Forest Service employees.
- Researched and published a manual for carbon stock accounting via satellite imagery processing methods.

### USDA Forest Service, Northern Regional office, Missoula, MT

Remote Sensing Data Science Analyst // December 2008 – May 2010

- Developed automated image data pre-processing scripts in ARC Macro Language (AML)
- Applied the following machine learning approaches to classify satellite imagery; MCMC, Random Forests, K-NN, ML.
- Addressed and resolved problems with data acquisition, processing techniques and product accuracy.
- Completed a comparative analysis of data classification techniques accuracy in classifying land class and forest species data using Python and ArcGIS.
- Applied an artificial neural network to classify satellite imagery into various forest species classes.

### US Army, Ireland Army Community Hospital, Fort Knox, KY

Assistant NCO In-Charge // December 2007 – December 2008

#### USDA Forest Service, Northern Regional Office, Missoula, MT

Remote Sensing Data Technician // June 2007 – December 2007

#### Education

#### Montana State University, Bozeman, MT

M.S. in Environmental Science and Applied Statistics // 2014

Thesis: "Scaling and Uncertainty in Landsat Remote Sensing of Biophysical Attributes"

### University of Montana, Missoula, MT

B.S. in Forest Resource Management and GIS // 2010