
Xin Zhang

📍 Norfolk, VA (open to relocate) | 📞 (434) 851-4899 | ✉ xzhang33@email.wm.edu
in in/xin-zhang-2018 | 🌐 github.com/SnowingSita | 🏠 snowingsita.github.io

EDUCATION

- M.S. Computer Science** – Specialization in Computational Operations Research Aug 2017 – May 2019
College of William & Mary, Williamsburg, VA GPA: 3.5
Honors and Awards: Graduate Teaching Assistantship
- B.A. Sociology** – Minor Mathematics Aug 2012 – May 2016
Sweet Briar College, Sweet Briar, VA Mathematics GPA: 3.7; Overall GPA: 3.2
Honors and Awards: Dean's List, Founder's Scholarship, Leadership Award, Service Award
Activities: Paint 'n' Patches Club (Theater Society), Chinese Club (*Treasurer & Secretary*)
- Continuing Education** – Professional Development
Self-learning through several massive open online course platforms (Coursera, DataCamp, edX)
Completed 15 courses in Computer Science and Data Science

WORK EXPERIENCE

- Predictive Modeler**, Data & Analytics Department Aug 2019 – Present
PRA Group, Norfolk, VA
- Developing and enhancing predictive scoring models for operational strategies using SQL, R, Python and SAS
 - Gathering source data and performing data preparation and data cleaning for modeling and analysis
 - Analyzing data with use of statistical analysis, machine learning algorithms, and data mining techniques
 - Deploying data pipelines and predictive models in production environments
 - Translating analytic findings into business insights and strategy recommendations
- Graduate Teaching Assistant**, Mathematics & Computer Science Department Aug 2017 – May 2019
College of William & Mary, Williamsburg, VA
- Intern**, Office of Administration Sep 2016 – Aug 2017
Sweet Briar College, Sweet Briar, VA

SKILLS

- Operating Systems:** Windows, Mac OS, Unix/Linux
- Languages:** R(caret, data.table, DMwR, dplyr, ggplot2, h2o, iml, recipes, tidyr),
Python(Matplotlib, NumPy, pandas, scikit-learn, Seaborn),
SQL(Oracle/PLSQL, PostgreSQL)
- Tools:** L^AT_EX, AMPL, Jupyter Notebook, RMarkdown, Git/GitHub, Command Line, Oracle Database,
SAS Enterprise Miner, Arena/SIMAN, Regular Expressions, Microsoft Excel, Maple, SPSS
- Analytic Skills:** Data Analysis, Data Mining, Data Visualization, Deep Learning(Neural Networks),
Discrete Event Simulation, Linear Programming(CPLEX, Gurobi), Mathematical Statistics,
Machine Learning(Classification, Clustering, Regression), Predictive Modeling, Probability,
Time Series Analysis(ARIMA, Exponential Smoothing, GARCH)
- Soft Skills:** Active Learner, Detail Oriented, Self Motivated, Team Player, Problem Solver

RELATED COURSEWORK

- | | | |
|-----------------------------|----------------------------------|------------------------------------|
| Linear Programming | Discrete Optimization | Probability |
| Network Location Theory | Network Optimization | Data Mining |
| Models & Applications in OR | Applied Machine Learning | Mathematical Statistics |
| Simulation & Modeling in OR | Optimization in Machine Learning | Statistical Analysis of Simulation |

ACADEMIC PROJECTS

- DrivenData Challenge: Data Mining the Water Table**, *Data Mining* (group project) Spring 2019
- Implemented classification models using random forest, k-nearest neighbors, and logistic regression
 - Performed data cleaning/pre-processing and further analysis in R (packages used: caret)
 - Collaborated with other team members through GitHub
- Redistricting Police Patrol Zones**, *Simulation & Modeling in Operations Research* (individual project) Fall 2018
- Improved the workload min-max ratio between five patrol zones in local county from 1.92 to 1.26
 - Simulated local police patrol system in Arena/SIMAN simulation software
 - Conducted data analysis in R (packages used: dplyr, ggmap, ggplot2, mapview, sp, rgdal, raster)
 - Applied time series and geographic information system package to help analyzing the data
- Confidence Region Plotting**, *Statistical Analysis of Simulation Models* (group project) Spring 2018
- Contributed to existing R package `conf` by adding code for four more univariate distributions
 - Adapted an existing confidence regions plotting technique and two improvement heuristics
 - `conf` package is available at <https://CRAN.R-project.org/package=conf>