Xin Zhang

Norfolk, VA (open for relocation) | (434) 851-4899 | xzhang33@email.wm.edu
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)
Completing 15 courses in Computer Science and Data Science

WORK EXPERIENCE

Predictive Modeler, Data & Analytics Department
PRA Group, Norfolk, VA — Aug 2019 – Present
- Developing and enhancing predictive scoring models for operational strategies using SQL, R, Python and SAS
- Deploying data pipelines and predictive models in production environments
- Analyzing data with use of statistical analysis, machine learning algorithms, and data mining techniques
- Translating analytic findings into business insights and strategy recommendations
- Gathering source data and performing data preparation and data cleaning for modeling and analysis

Graduate Teaching Assistant, Mathematics & Computer Science Department
College of William & Mary, Williamsburg, VA — Aug 2017 – May 2019

Intern, Office of Administration
Sweet Briar College, Sweet Briar, VA — Sep 2016 – Aug 2017

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: LaTeX, 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, 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, KNN, 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`