



## education

### phd | statistics

u south carolina | 2018-present

- gpa: 3.5
- Passed qualify exam

### ms | actuarial science

columbia university | 2018

- gpa: 3.5
- Member of ASCU

### bs | econ & math

u southern utah | 2016

- Math gpa: 3.6, Econ gpa: 3.5
- Minor in finance: 3.6
- Dean's List, May 2016

## highlighted skill

### stat/math/data science

probability

statistics inference

extreme value and catastrophe modeling

generalized linear models

decision tree

cluster analysis

classification

stochastic processes and time series

high dimensional data

### computer science

web design and data scraping

neural network

natural language processing

optimization algorithm

numerical analysis

### languages

experienced : r • python • excel vba

basic : sql • matlab • sas

### actuarial exam

p • fm • ifm • srm

## teaching

### u south carolina | lab instructor

fall 2018 - present

- Teach three sections of STAT 201 Lab, 72 students.
- Design course material for student to learn statistical model also programming language, and published on personal website.
- Design code to automatically validate student's work and update students' homework score

## experience

### yu chun business consulting | actuarial consultant & team leader

summer 2019 | shanghai

- Web data scraping with over 20,000 contract online
- Document analysis together with regular expression and clustering

### guy carpenter | research assistant

summer 2017 | new york

- Use SQL language to manipulate raw data and construct Access database
- Calculate adjusted loss ratio volatility and correlation between different line of business, for over 1400 companies.
- Develop poisson regression model to predict actual claim count.
- Drafted weekly research reports to present to chief actuary Mr. Steve White.

### casino game maker | math modeling intern

winter 2016 | utah

- Develop math model to predict winning strategy for 52-deck card games and test different variant of rules & decisions.
- Design excel VBA templates to calculate conditional probability and to simulate decision tree.
- Invent game rules by set up additional bonus for gamblers to balance expected return and adjust volatility.

### new china life | summer internship

summer 2014 | shanghai

- Clean & generate premium data for accidental insurances via excel functions
- Analysis, calculate and report summary statistics of regional data.

## project

### u south carolina | medical expenditure project

fall 2018 - present

- Design algorithm to detect and choose dependent variables from a list of around 2000 variables.
- build binomial hierarchical model to predict occurrence of smoking related disease
- Estimate societal economic costs cost of smoking

### u south carolina | time series bootstrap

spring 2019 - present

- Implement block and residual bootstrap to simulate parameter distribution for interest rate arima model.
- Investigate in the cover rate performance of moving block and stationary bootstrap for confidence interval

### columbia university | ego-network project

spring 2018

- Utilize a bayesian stochastic membership model to detect circle for social media friendship network data.
- Latent variable analysis for textual author recognition. Establish collaborative filtering (recommender systems) with memory based model.
- Image classification with convolutional neural network and random forest classifier

### southern utah university | teaching/research assistant

jan 2015 - may 2015

- Modify script to scrape and clean data from real estate website for Dr. Price's research on student's enrollment.
- Serve as Teaching assistant for Math 1040 Algebra (60 people).