# Xinyu Zhang

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## Professional summary

Data analyst equipped with actuarial science knowledge in healthcare industry with two years of experience. Competencies include BI reporting, provider behavior analysis and business strategy analysis. Also passionate about statistical machine learning.

## SOA ASA Candidate          Passed P, FM, MFE, MLC and C exam.

## Education

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|---|---|---|---|
| MS in Statistics | University of Texas at Dallas | GPA: 3.9 | Expected: May 2019 |
| BS in Mathematics, Minor in Finance | University of Arizona | Dec 2016 | |

## Experience

**Data Analyst**    2018-05 – Present

Chinese Community Health Care Association       San Francisco, California

- Analyzing providers behavior and made adjustment to their capitated payment system.
- Visualizing the flow of claims and revenue.
- Developing flash reporting to enable near real-time business risk management.

**Data Analyst Intern**      2017-01 – 2018-04

Chinese Community Health Care Association       San Francisco, California

- Developed interactive profit testing solution to help transform from fee for service to capitated payment system.
- Designed database solution to better categorize monthly claims and visualize it with flowchart.
- Studied Hierarchical Condition Categories (HCC) based risk score from CMS and use it to verify payment received from the insurance company.

**Actuarial Intern**       2016-05 – 2016-08

Anxin Agricultural Insurance Company    Shanghai, China

- Assisted in quarterly solvency report to China Insurance Regulatory Commission (CIRC) under the scheme of China Risk Oriented Solvency System (C-ROSS).
- Pricing and loss ratio review on product in design.

## School and personal study projects

- Predict Prudential life insurance risk class using random forest, gradient boost tree, GLM elastic net, SVM and neural network ensemble.
- Shiny app simulates midterm election result under various contamination settings.
- Predict cryptocurrency price using classic time series model and long term short term deep learning techniques.
- Predict Airbnb listing price and occupancy rate based on house features using decision tree, neural network and regression.
- Analyze the effect of right-to-carry laws on crime rate using fixed effect regression model with instrumental variables.

**Skills**  SQL, Excel, R, R markdown, Shiny app, Python, Stata, Certified Base Programmer for SAS 9, MATLAB