

# KUNSHAN YIN, FCAS, MAAA, CSPA, CSCR, PHD

Consulting Actuary | San Francisco, California



Kunshan has been in the financial industry since 2007, focusing on predictive modeling in catastrophe (CAT) risk, ratemaking and risk management. In this role, he has developed solutions through the design and implementation of advanced predictive models in both auto and home. Kunshan serves as project manager and modeler for multiple predictive analysis projects in rate making, territorial analysis, vehicle symbol scoring and spatio-temporal data analysis. He reviews and develops rate indication templates and tools internally and externally. He serves in a consulting actuary role in projects involving machine learning modeling and CAT modeling reviews.

Kunshan has designed, modeled and maintained rating plans; performed modeling using Generalized Linear Model (GLM), Generalized Additive Model (GAM), Multivariate Adaptive Regression Splines (MARS), Gradient Boosting Machine (GBM) and other machine learning methods; and acted as a key supporting source for rate filings in various states.

Kunshan has been a model validator in the financial industry, validating models in areas such as data integration, conception soundness, model performance, model implementation and model monitoring. He also brings extensive experience in CAT modeling, risk analysis in CAT bonds, Industry Loss Database (ILD) and professional commentaries on Insurance-Linked Securities (ILS).

★ Qualified to sign statements of actuarial opinion per the American Academy of Actuaries (AAA)

## YEARS OF EXPERIENCE

11

## AREAS OF FOCUS

Predictive Analysis, Machine Learning, Explanatory Model Analysis

## EDUCATION

University of Texas at Dallas, 2007  
Ph.D. Statistics

Nanjing University, 2002  
M.S. Economics

Shandong University, 1999  
B.S. Computational Math

## CERTIFICATIONS

Casualty Actuarial Society (CAS), Fellow, 2018

AAA, Member, 2015

International Society of Catastrophe Managers (ISCM)  
and the CAS Institute (iCAS), Certified Specialist in  
Catastrophe Risk, 2021

The CAS Institute  
Certified Specialist in Predictive Analytics (CSPA), 2018  
Certified Specialist in Catastrophe Risk (CSCR), 2022

Statistical Analysis System (SAS), SAS-Certified Data Scientist  
using SAS 9, 2019

## THOUGHT LEADERSHIP HIGHLIGHTS

“Introduction to Power BI,” Pinnacle Internal Zenith Webinar,  
September 2022

“Introduction to Clustering for Territorial Ratemaking,”  
Pinnacle APEX Webinar, September 2022

“Intro to Natural CAT Risk Modeling and Analysis: Predictive  
Analytics,” Pinnacle Internal Zenith Webinar, July 2021

“Bayesian and Frequentist Methodologies for Analyzing  
Method Comparison Studies With Multiple Methods,”  
Statistics in Biopharmaceutical Research, 2010

“A Bayesian Approach for Sample Size Determination in Method  
Comparison Studies,” Statistics in Medicine, 2008

“The Analysis of Electronic Supply Chain Management,”  
Policy & Management, 2001 (in Chinese)

## EMPLOYMENT HISTORY

Pinnacle Actuarial Resources, Inc., 2021 – Present

MUFG Union Bank, 2017 – 2020

Esurance Insurance Services, Inc., 2013 – 2017

EQECAT, Inc., 2007 – 2013