MICHAEL CHEN, FCAS, MAAA, CSPA

Senior Consulting Actuary | Des Moines, Iowa

Focused on pricing and product development, Michael develops homeowners, private passenger auto, farmowners, crop insurance and commercial lines pricing solutions through the design and implementation of advanced predictive models.

Michael works extensively on the application of advanced statistical modeling techniques to the insurance process. His experience in predictive analytics applications includes rating and underwriting plan design, homeowners by peril analyses, auto vehicle characteristics analyses and scorecard development, territory boundary development and commercial lines pricing. Michael has made numerous presentations on topics relating to predictive analytics, its application to insurance and professionalism.

Michael performs traditional actuarial analyses, including overall rate level indications, rate and rule filings, regulatory support and assessment of company financial experience. He develops risk classification plans through assessment of underwriting profitability, competitive analysis and research of insurance laws.

He has also designed custom underwriting scorecards, developed claim triage scorecards, peer-reviewed and advised companies on their analytics processes, and performed loss reserving analyses.

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

YEARS OF EXPERIENCE

24

EDUCATION

University of Iowa
B.S. Psychology, 2000
B.A. Sociology, 2000

CERTIFICATIONS

Casualty Actuarial Society (CAS), Fellow, 2009

AAA, Member, 2007

The CAS Institute, Certified Specialist in Predictive Analytics (CSPA), 2017

SAS® Certified Predictive Modeler Using SAS® Enterprise Miner™ 13, 2017

PROFESSIONAL VOLUNTEERISM

CAS Professionalism Education Working Group, 2012 – Present

Co-Authored **2025 CAS Research Paper Series on Race and Insurance Pricing** (Phase 2):

- "Potential Unintended Impacts of Bias Mitigation in a Competitive Insurance Market"

THOUGHT LEADERSHIP HIGHLIGHTS

"Potential Unintended Impact of Bias Mitigation," CAS Webinar, July 2025

"Fairness," Farm Bureau Actuarial Conference, July 2025

"2025 Update to the Fairness in Insurance Discussion," Pinnacle APEX Webinar, February 2025

 "Bias and Insurance: Emerging Regulation Worldwide and Potential Unintended Impacts of Regulatory Restriction," CAS Casualty Loss Reserve Seminar (CLRS), September 2024

"Fairness and Risk Based Pricing," Central States Actuarial Forum (CSAF) 2024 Annual Meeting, September 2024

"99 Problems but Bias Ain't One??" CAS Ratemaking and Product Management (RPM) Seminar, March 2024, July 2024

"Potential Unintended Impacts of Bias Mitigation on Other Protected Class Dimensions: A Preview of New CAS Research," CAS Seminar on Reinsurance, June 2024

"Bias Testing Implementation" Workshops, CAS Spring Meeting, May 2024

"2024 Update to the Fairness in Insurance Discussion," Pinnacle APEX Webinar, February 2024

"Advanced Machine Learning in Real Life," CAS RPM Seminar, 2023

"ChatGPT: The Actuarial Perspective," Pinnacle APEX Webinar, September 2023

"Making Sense of Disparate Impact," CAS Annual Meeting, Midwestern Actuarial Forum, Buckeye Actuarial Continuing Education, 2022

"How to Incorporate Simulated Data into Actuarial Research," Pinnacle APEX Webinar, February 2020

"GLMs, Machine Learning, & More, Oh My!" CAS Annual Meeting, 2018, 2019

"The Actuary's Evolving Role in Today's Dynamic Industry Landscape," Pinnacle APEX Webinar, February 2019

"Lights! Camera! Professionalism!" CAS RPM Seminar, 2017, 2018

"Vehicle History: Insurance Scoring for Your Car," CAS RPM Seminar, 2017, 2018

PAST PROFESSIONAL VOLUNTEERISM

CAS Examination Committee	2010 – 2018
CAS Learning Enhancement Process Mentors Working Group	2021 – 2023

EMPLOYMENT HISTORY

Pinnacle Actuarial Resources, Inc., 2023 – Present

Willis Towers Watson, 2020 – 2023

Pinnacle Actuarial Resources, Inc., 2014 – 2020

FBL Financial Group, 2003 – 2014

American Republic Insurance Company, 2001 – 2003