

PEGGY BRINKMANN

FCAS, MAAA

Principal

peggy.brinkmann@milliman.com

415 394 3726



Current Responsibility

Peggy Brinkmann is a principal and consulting actuary with the Property and Casualty Practice in Milliman's San Francisco office. She joined the firm in 2012. Peggy specializes in applying emerging technologies and advanced analytics to develop innovative insurance products for both traditional and start-up insurers.

Professional Work Experience

Peggy's areas of expertise include:

- Understanding statistics and machine learning, including generalized linear models, Bayesian models, survival models, decision trees, and clustering
- Performing data mining processes, including data preparation, feature extraction, model building, and model evaluation
- Developing risk scores with external data sources such as credit reports, vehicle characteristics, and telematics devices
- Pricing new insurance programs and redesigning existing ones by introducing advanced predictive modeling, tiering, and/or new rating variables
- Preparing rate filings to facilitate efficient regulatory reviews

Peggy has developed a variety of predictive models for profitability, claim risk, retention, and improving efficiency in underwriting and claims processes, including:

- Telematics: Developed telematics-based driving risk scores with both OBDII- and smartphone-based data
- Vehicle prediction model: Developed risk scores based on the characteristics of vehicles, such as horsepower, weight, and Electronic Stability Control
- Undisclosed driver pursuit: Identified policies most likely to have undisclosed youthful operators
- Driver training programs: Measured efficacy of various programs claiming to reduce crash risk for elderly and teen drivers
- Lifetime value modeling: Estimated the expected future economic value of a household, including potential value of future cross sales
- Mortality data mining: Mined hundreds of auto insurance variables for predictors of mortality risk

- Medical claim fraud: Modeled medical provider fraud using medical billing data
- Variable annuity lapse: Modeled policyholder behavior using policy and vendor data

Prior to joining Milliman, Peggy was Director of Analytics and Insights at the Allstate Research and Planning Center.

Professional Designations

- Fellow, Casualty Actuarial Society
- Member, American Academy of Actuaries

Education

- MBA, Santa Clara University
- BA, Mathematics and Education, Washington University in St. Louis

Presentations and Publications

Peggy has published articles and given presentations on big data, predictive modeling, and usage-based insurance.