

2020 Annual Meeting

Virtual Program

November 9-12, 2020

MONDAY, NOVEMBER 9

CELEBRATION OF NEW FELLOWS AND ASSOCIATES AND AWARDS PRESENTATION

(10:00 a.m. – 11:15 a.m. ET)

The Annual Meeting kicks off with a virtual celebration of our new Associates and Fellows! Watch our more than 350 new designees celebrate their achievements in their personal and unique ways, and be on the lookout for surprise special guests offering their congratulations! The session will also include recognition of our 2020 award winners in areas such as university engagement, research, and volunteerism, as well as the traditional handoff of the CAS Presidential Medallion from CAS President Steve Armstrong to CAS President Elect Jessica Leong, presented in a non-traditional way.

Hosted by CAS President Steve Armstrong and featuring special guests

TOWN HALL WITH CAS LEADERS

(11:30 a.m. – 1:00 p.m. ET)

Join us for a Town Hall meeting with members of the CAS Board of Directors. The first half of the 90-minute session will introduce CAS members, candidates, and other stakeholders to the 2021-2023 CAS Strategic Plan, which is encapsulated in our new Envisioned Future, the Vivid Descriptions of that future, and our strategic areas of focus for the next three years that will propel us forward. The second half of the session will cover other initiatives taking place within the CAS, such as in the examination system, and the topics that are important to you. If you have a specific issue you would like to see addressed, please send an email to Mike Boa at mboa@casact.org.

The session is designed to be interactive and attendees are encouraged to ask questions and provide feedback during the Town Hall. We invite you to join the conversation and share your views with CAS leadership.

Panelists:

Steve Armstrong, CAS President

Victor Carter-Bey, CEO

Jessica Leong, CAS President Elect

Kathy Antonello, CAS President Elect Designate

CEO/EXECUTIVE ROUNDTABLE: PERSPECTIVE ON 2020 AND OUTLOOK FOR 2021

(1:30 p.m. – 2:45 p.m. ET)

This general session will bring together industry leaders to discuss the state of the industry after a unique and challenging year. For this panel, discussion topics might include:

- Perspectives on 2020, such as the implications of COVID-19, catastrophes, and other issues affecting the industry over the past 10 months.
- What does 2021 have in store for the insurance industry?
- How can we better address diversity, equity, and inclusion as an industry?
- The role of actuaries and potential opportunities for expanding beyond traditional roles.

Moderator:

Steve Armstrong, FCAS, CAS President

Panelists:

Victor Carter-Bey, D.M., CEO, Casualty Actuarial Society

Sean Kevelighan, President and Chief Executive Officer, Insurance Information Institute

Ryan Michel, FCAS, MAAA, MBA, President & CEO, Allstate Insurance Company of Canada

Alice Underwood, FCAS, MAAA, CERA, Ph.D., Global Leader, Insurance Consulting and Technology, Willis Towers Watson

CAS STUDENT AMBASSADOR CONFERENCE

Monday, November 9

11:00 a.m. – 4:00 p.m.

The CAS Student Central Ambassador program, now in its fifth year, was launched to spur the continued growth of CAS Student Central, the CAS’s free membership program for university students pursuing a career as an actuary. Actuarial student leaders serve as CAS Ambassadors – the youngest of CAS’s volunteer workforce – with the goals of increasing the awareness of CAS Student Central among their classmates and strengthening CAS ties to the university. Ambassadors host on-campus events featuring CAS member speakers, provide information to fellow students, and spread the word about the CAS and actuarial profession as a career choice.

The CAS has invited its student ambassadors from 30 universities to attend a 2-day CAS Student Ambassador Conference November 9-10. The conference will consist of workshops, professional development sessions, and networking among students and CAS members. The students will have a chance to hold discussions about the role of CAS Student Central Ambassadors, covering best practices, challenges, examples of successful events, and plans for the upcoming semester. These discussions will assist in further developing the CAS Student Central Ambassador Program.

Tuesday, November 10

FS: Prosperity Ahead or Not?

Featured Speaker - 11/10/2020, 10:00:00 AM - 11:15:00 AM, Level of Knowledge:

The economy never sleeps, and neither can your business. As the U.S. heads toward the 2020 elections, and the E.U. and U.K. wrangle over Brexit, Todd Buchholz shows you the forces that will determine whether the economy climbs higher and what it means for you.

- Discover how demographics, technology, and globalization are reshaping the economy and our future

- Pinpoint the signs of stock market rallies, and the warning signs of slumps
- Identify the political pressures on trade, debt, and interest rates from the U.S. to the E.U. to China

Moderator: Frank Gribbon

Speakers:

Todd Buchholz, Former White House Director of Economic Policy, CNBC Regular

GS2: COVID-19's Impact on the P&C (Re)Insurance Industry

General Session - 11/10/2020, 12:00:00 PM - 1:30:00 PM, Level of Knowledge:

In addition to being a significant industry loss event, COVID-19 has also been a unique challenge for actuaries, given the lack of historical precedent, the ongoing nature of the event, its broad and varied impact across different lines of business, the lack of relevant data available, and the high degree of uncertainty.

Brian Brown will share a consulting actuary's perspective on the impact of COVID-19 on the industry as a whole, including the latest available insight on the magnitude and nature of the impact by line of business.

Justin Brenden will discuss his experience in estimating COVID-19 losses at a reinsurance company across most of the affected lines of business, including not only the actuarial analysis, but also the accounting implications and the communication of those results.

Moderator: Ben Carrier

Speakers:

Brian Brown, Consulting Actuary, Milliman, Inc.

Justin Brenden, EVP, Chief Reserving Actuary, Third Point Reinsurance Ltd.

CS21: Tesla "Summons" a Future Without Auto Claims

Concurrent Sessions - 11/10/2020, 2:15:00 PM - 3:30:00 PM, Level of Knowledge: Level 1: No prior knowledge of the subject (0-3 years)

For more than a century, insurers have leveraged new technology to manage risk and reduce the number of claims. In this session, we'll examine the history of how technology moves us from loss compensation to loss prevention. We'll then do a specific drill-down on how modern automakers are poised for the next big advance, with features like 'summon' from Tesla.

Moderator: Kenneth Hsu

Speakers:

Martin Frappolli, Principal, Longhorn Knowledge Resources

CS25: The Future of Talent: Attracting Tomorrow's Actuaries

Concurrent Sessions - 11/10/2020, 2:15:00 PM - 3:30:00 PM, Level of Knowledge:

The talent gap is no longer looming—it's here. Join Gamma Iota Sigma, the insurance industry's premier collegiate talent pipeline, to get an inside look at what the next generation really wants in an employer and discuss how to turn today's talent risk into tomorrow's talent.

Moderator: Aaron Hillebrandt

Speakers:

Jack Richards, , Deloitte Consulting LLP
Grace Grant, Executive Director, Gamma Iota Sigma

CS8: COVID-19 – The Good, the Bad and the Ugly

Concurrent Sessions - 11/10/2020, 2:15:00 PM - 3:30:00 PM, Level of Knowledge:

What did the insurance industry do well in this unprecedented worldwide pandemic? What did we do poorly? What should we do differently to better prepare for the next pandemic? Or, even more importantly, what can we do to help our customers prepare? Join us as we discuss important lessons learned from COVID-19.

Moderator: Beverly Philips

Speakers:

James Lynch, Chief Actuary & Vice President of Research and Education, Insurance Information Institute
Annmarie Baribeau, President, Insurance Communicators, LLC

CS9: Data Ethics

Concurrent Sessions - 11/10/2020, 2:15:00 PM - 3:30:00 PM, Level of Knowledge: Level 1: No prior knowledge of the subject (0-3 years)

With the use of “non-tradition” or “non-insurance” data becoming more prevalent, how do you balance the availability of data with the anticipated Use Case. With advanced analytics (such as AI or machine learning), how do you ensure that you are not introducing unexpected bias? A topic not only being addressed internally in organizations but from a regulatory perspective, this session will describe Data Ethics and how it's influencing data management and data analytics.

Moderator: Frank Gribbon

Speakers:

Peter Bothwell, , AF Group
Tracy Spadola, Vice President Strategic Data Operations, ISO/Verisk

CS16: Liquidity Risk Management and Capital Adequacy Assessment

Concurrent Sessions - 11/10/2020, 2:15:00 PM - 3:30:00 PM, Level of Knowledge:

Liquidity risk management is essential to the proper operation of the insurer, the protection of policyholders and financial stability. Past experience demonstrates that even solvent insurers may experience material financial distress, including failure, if they do not manage their liquidity prudently. When confronted with stress events, insurers with insufficient liquidity may be forced to take remedial actions that can amplify or accelerate stresses through the financial system.

The panelists will discuss historical experiences in liquidity failures and in developing core principles of liquidity being developed by the IAIS .

Moderator: Bob Wolf

Speakers:

Chester Szczepanski, Senior Vice President & Chief Actuary, Donegal Insurance Group
Michael Lagomarsino, Senior Director, AM Best

CS11: Formulating Reserve Risk

Concurrent Sessions - 11/10/2020, 4:15:00 PM - 5:30:00 PM, Level of Knowledge: Level 1: No prior knowledge of the subject (0-3 years)

This session explains how to derive reserve risk from a triangle of ultimate loss estimates. The ultimate losses are assumed to be computed by an "Actuary in a Box" using a fixed algorithm. The resulting reserve risk depends on both the data and the method used for estimating ultimate. The presentation focuses on the closed-form methods using a triangle of ultimate loss estimates, including the Siegenthaler Method (2018) and the Rehman-Klugman (2010) method. These approaches can also be viewed as a generalization of the closed-form Mack formula and its one year Mertz-Wultrich extension when the Chain Ladder method is used. The session will provide useful context defining one-year risk and comparing the different methods. Case studies will be explored using hypothetical data.

Moderator: Dushyant Pattni

Speakers:

Ira Robbin, , Southern Connecticut State University
Yu Shi "Andy" Feng, , TransRe

CS17: A New Categorization Scale for Global Tropical Cyclones & the 2020 Atlantic Hurricane Season

Concurrent Sessions - 11/10/2020, 4:15:00 PM - 5:30:00 PM, Level of Knowledge:

Atlantic hurricane seasons have a long history of causing significant financial impacts, with Harvey, Irma, Maria, Florence, Michael and Laura combining to incur more than 350 billion USD in direct economic damage from 2017-2020. The primary drivers of this damage ranged from wind (Laura), to wind and storm surge (Irma, Maria and Michael) to rainfall and inland flood (Harvey and Florence).

This presentation will also discuss the 2020 Atlantic hurricane season, including seasonal forecasts, observed large-scale atmospheric and oceanic conditions and landfalling hurricanes.

Moderator: Beverly Philips

Speakers:

Philip Klotzbach, , Colorado State University
Steve Bowen, Head of Catastrophe Insight, Aon

CS19: Risk Agility: Linking Enterprise Risk Management to Strategy in a Pandemic World

Concurrent Sessions - 11/10/2020, 4:15:00 PM - 5:30:00 PM, Level of Knowledge:

Risk Agility is needed to provide a clear path to linking risk management with a successful approach to strategy.

This session will introduce the three main components of Risk Agility:

- risk intelligence
- bias towards action
- flexibility.

This session will include a lively discussion of the relative importance of those three elements to an ERM program. We will concentrate on examples of Risk Intelligence in action, showing how it reduces the impact of the biases described in behavioral economics.

Moderator: Bob Wolf

Speakers:

David Ingram, EVP, Willis Towers Watson
William Wilkins, Chief Risk and Predictive Analytics Officer, Safety National

CS23: Job Losses and the Pandemic – What We Know and What’s Next

Concurrent Sessions - 11/10/2020, 4:15:00 PM - 5:30:00 PM, Level of Knowledge: Level 1: No prior knowledge of the subject (0-3 years)

During this recent environment of COVID-19 how is the Workers Compensation system impacted? NCCI’s Chief Actuary and Lead Economist will present a summary of the current state of the Workers Compensation environment.

Moderator: Meagan Mirkovich

Speakers:

Donna Glenn, Chief Actuary, NCCI Holdings, Inc
Leonard Herk, Senior Economist, NCCI Holdings, Inc

CS5: Cannabis Insurance: The Blossoming Weed

Concurrent Sessions - 11/10/2020, 4:15:00 PM - 5:30:00 PM, Level of Knowledge:

Marijuana is now legal in 11 states, two territories (Guam and Northern Mariana Islands) and the District of Columbia. (D.C.) An additional 33 states and four territories allow medical use only. All but three states allow CBD product. With all of this state legalization, marijuana remains illegal under federal law.

This session will first explore various cannabis related entities, coverage areas and issues with securing insurance. The next section will discuss recent hemp and marijuana related coverage lawsuits. These will be followed by a Q&A session regarding incorporating this information into actuarial analyses.

Moderator: Carl Ashenbrenner

Speakers:

Brenda Wells, ,

Melissa Roeder, , Foley Mansfield

Wednesday, November 11

GS1: The Actuary and Social Justice

General Session - 11/11/2020, 10:00:00 AM - 11:30:00 AM, Level of Knowledge:

Every actuary knows their responsibility towards avoiding unfairly discriminatory variables in ratemaking. But where does the concept of “disparate impact” fit in? And what does it mean towards the responsibility an actuary has to investigate, highlight and fight systematic biases in insurance? This session will explore ways in which actuaries can use data driven approaches to uncover and action inequality.

Moderator: Kuda Chibanda

Speakers:

Mary Frances Miller, , Select Actuarial Services

Jessica Leong, CAS President-Elect, Zurich North America

Talithia Williams, ,

Tomantha Kyle, ,

GS4: The Opioid Epidemic and Insurance

General Session - 11/11/2020, 10:00:00 AM - 11:30:00 AM, Level of Knowledge: Level 1: No prior knowledge of the subject (0-3 years)

The opioid epidemic is raging in America. Per the 2019 National Survey on Drug Use and Health. Mortality in the United States, 130 Americans die every day from an opioid overdose and over 10 million people misused opioids in 2018. As a result, there has been a move to seek damages via tort law.

This session will give:

- * A quick overview of the crisis
- * Its impact on tort liability and insurers
- * Anything we can do to mitigate it.

Moderator: Frank Gribbon

Speakers:

Kevin Harris, ,
Mark Pew, Senior VP, Preferred Medical

CS3: Avoiding Adverse Selection

Concurrent Sessions - 11/11/2020, 12:30:00 PM - 1:45:00 PM, Level of Knowledge: Level 2: General knowledge of the subject (4-9 years)

The changing and growing used vehicle market has given insurers and opportunity to create a new underwriting/pricing variable. Not all used vehicles are in good condition and vehicles in poor condition or heavily damaged are shown to have much higher loss costs. By more accurately pricing used vehicles, insurers can save one to two points to their bottom line.

Moderator: Feng Chen

Speakers:

Christopher Whipple, , Red Mountain Technologies, LLC
David McDonald, Partner, Triad Analytic Solutions LLC
Brandon Wockenfuss, , Red Mountain Technologies, LLC

CS28: University Actuarial Programs and the Property and Casualty Industry – CAS University Award Winners Share Their Insights and Best Practices

Concurrent Sessions - 11/11/2020, 12:30:00 PM - 1:45:00 PM, Level of Knowledge:

Interested in learning how companies can partner with universities to prepare the next generation of property and casualty actuaries? Want to know the innovative ways universities are incorporating property and casualty into their curriculum, research, and industry engagement initiatives? Then attend this session presented by representatives from the 2020 CAS University Award winning schools: McMaster University, Middle Tennessee State University, Temple University, and University of Illinois at Urbana-Champaign

Moderator: Nick Klinka

Speakers:

Anas Abdallah, , McMaster University

Krupa Viswanathan, Associate Professor, Temple University
Don Hong, Professor and Director, Middle Tennessee State University, Mathematic Science Department
Runhuan Feng, Professor, University of Illinois at Urbana-Champaign
Anson Lo, , Economical Insurance

CS13: How to Effectively Blend Data Science and Actuarial

Concurrent Sessions - 11/11/2020, 12:30:00 PM - 1:45:00 PM, Level of Knowledge:

We often hear unsuccessful stories on data science initiatives in P&C insurance industry. Actuaries should have a stake in them, as actuaries are the backbone of analytics in insurance. Whether we peer review, build models, or influence how limited investment should be spent on improving data & analytics led initiatives, actuaries can play a critical role in driving the success of data science within their company. Using ratemaking and pricing models as an example, we share a few tips on what to do and what to avoid in effectively blending data science and actuarial processes for delivering analytical insights.

Moderator: Meagan Mirkovich

Speakers:

Takeshi Yamaguchi, MANAGING DIRECTOR, Plymouth Rock Assurance
Aditi Baker, Head of Data Science Accelerator, The Hartford

CS12: From the Field: An Inside Look at Providing Agricultural Microinsurance in Ethiopia and Nigeria

Concurrent Sessions - 11/11/2020, 12:30:00 PM - 1:45:00 PM, Level of Knowledge:

Agricultural microinsurance is a challenging but important solution for low-income rural populations globally. The speakers from the MicroInsurance Centre at Milliman will present real-world project examples from Ethiopia and Nigeria, with a focus on the technical research, pricing, subsidy considerations, and partnerships involved in providing a holistic insurance and risk management solution to smallholder farmers. The session will consider applications to the actuarial field.

Moderator: Carl Ashenbrenner

Speakers:

Michael McCord, ,
Mariah Mateo Sarpong, Director of Communications and Knowledge Management, MicroInsurance Centre at Milliman
Chukwuma Kalu, Head, Agriculture Insurance & Emerging Business, Royal Exchange General Insurance Co. Ltd (REGIC)
Mebrahtu Gebre, Department of Agricultural and Resource Economics, College of Dry-land Agriculture and Natural Resources

CS26: The New Workplace: Trends for 2021 and Beyond

Concurrent Sessions - 11/11/2020, 2:30:00 PM - 3:45:00 PM, Level of Knowledge: Level 1: No prior knowledge of the subject (0-3 years)

This session will present the results from a recent comprehensive survey of members of CAS Student Central, the CAS's membership program for university students. CAS Student Central includes over 8,500 members from over 700 different universities. The survey will inform actuarial hiring managers, candidate program coordinators, and recruiters about the actuarial talent pipeline. Survey results will cover demographics of desired employees and the strategies employers are using successfully. Results may also provide insight into recruitment in a virtual/hybrid world, what students are seeking from employers in the current (and post-) COVID-19 environment, and more.

In addition, the International Association of Black Actuaries (IABA) will present results from their IABA Work Culture Survey, which explored attitudes from its members in areas such as relationship management, work environment and career development within their companies.

Moderator: Sandy Santomenno

Speakers:

Tamar Gertner, University Engagement Manager, Casualty Actuarial Society

Kendall Williams, Staff Actuary, Casualty Actuarial Society

Gloria Asare, ACAS, MAAA, Specialist Actuary, International Association of Black Actuaries

CS29: Weapons of Math Destruction

Concurrent Sessions - 11/11/2020, 2:30:00 PM - 3:45:00 PM, Level of Knowledge: Level 2: General knowledge of the subject (4-9 years)

Cathy O'Neil's book "Weapons of Math Destruction" has highlighted the social impacts and the downside on society of some of the widely used predictive models. Her book highlights the unintended consequences and sometimes apparent discriminatory impact of the use of models on such disparate areas as education, employee hiring decision, insurance and the criminal justice system.

The panelists for this session will discuss the book from the vantage point of their own analytics experience and research. The panel will represent diverse perspectives and include actuaries and a public servant.

Moderator: Winnie Li

Speakers:

Louise Francis, Consulting Principal, Francis Analytics and Actuarial Data Mining, Inc.

Robert Miccolis, Principal, Miccolis Consulting LLC

Christopher Monsour, Consultant, Data Robot

Nina Ahmad, , JNA Capital

Amy Brener, Director, The CAS Institute

CS30: Year-end Appointed Actuary Report – Discussing Your Results with Management and the Board: Case Studies on Hardest Discussions

Concurrent Sessions - 11/11/2020, 2:30:00 PM - 3:45:00 PM, Level of Knowledge:

Appointed Actuaries have many responsibilities which are outlined in various guidelines. In this session we'll wrestle with some of the unique challenges and potential issues you may encounter as an Appointed Actuary.

We'll talk through 5 key case studies of the Statement of Actuarial Opinion, Actuarial Opinion Summary and Actuary Report highlighting the 5 common challenges as well as best practices.

Moderator: Bob Wolf

Speakers:

Kathleen Odomirok, Principal, EY

Miriam Fisk, , Texas Department of Insurance

CS2: AI in Actuarial Science

Concurrent Sessions - 11/11/2020, 2:30:00 PM - 3:45:00 PM, Level of Knowledge:

Winner of 2020 Charles A. Hachemeister Prize. <https://www.casact.org/about/index.cfm?fa=hach>

This paper investigates how actuarial science may adapt and evolve in the coming years to incorporate rapid advances in Artificial Intelligence and Machine Learning and methodologies. After providing some background on machine learning and deep learning, and providing a heuristic for where actuaries might benefit from applying these techniques, the paper surveys emerging applications of artificial intelligence in actuarial science, with examples from mortality modelling, claims reserving, non-life pricing and telematics. For some of the examples, code has been provided on GitHub so that the interested reader can experiment with these techniques for themselves. The paper concludes with an outlook on the potential for actuaries to integrate deep learning into their activities.

Moderator: Linda Brobek

Speakers:

Ronald Richman, , AIG

CS15: Lights! Camera! Professionalism!

Concurrent Sessions - 11/11/2020, 2:30:00 PM - 3:45:00 PM, Level of Knowledge:

Have you ever come across professional dilemmas that you wish you had seen in a skit before facing them? If not, now's your chance! In this virtual format you will witness some fine acting by fellow actuaries while they perform sketches and grapple with such issues. You will walk away from this sessions with a better understanding of ASOP's, the Codes of Conduct, and how to apply them when you face your own professional ethical dilemmas. This session may be counted as professionalism credit for continuing education.

Moderator: Meagan Mirkovich

Speakers:

Michael Toothman, , West Virginia University
Melissa Huenefeldt, VP - Analytics Manager, Lockton Companies
Martin Menard, Director, PricewaterhouseCoopers

RT1: Construction Defect Methodologies and Trends

Roundtable - 11/11/2020, 4:00:00 PM - 5:00:00 PM, Level of Knowledge:

Construction defect claims continue to plague our industry. Discuss with your peers what loss projection methodologies are being used and how assumptions are trending. Learn about data segmentation, CD claim definitions, and common data challenges.

Moderator: Ron Kozlowski

Speakers:

Ronald Kozlowski, , RTK Actuarial & Professional Services

RT2: Bias in Models

Roundtable - 11/11/2020, 4:00:00 PM - 5:00:00 PM, Level of Knowledge:

One of the criticisms of the use of big data and predictive analytics in the insurance industry has been the potential for bias. This potentially takes the form of perpetuating inherent bias in the underlying process being modeled or proxy discrimination. The ultimate result can be disparate or disproportionate impact on protected classes. This round table will discuss the meaning of bias and proxy discrimination, what forms this can potentially take in the insurance modeling process, and what steps are being taken by model developers across industries to identify and address bias in models.

Moderator: Roosevelt Mosley

Speakers:

Roosevelt Mosley, Principal & Consulting Actuary, Pinnacle Actuarial Resources, Inc.

RT3: The hidden impacts of COVID on the Insurance Industry

Roundtable - 11/11/2020, 4:00:00 PM - 5:00:00 PM, Level of Knowledge:

Continuing the discussions from their concurrent session, this round table will expand upon the insights of all of the impacts seen thus far from COVID: Homeowners Insurance, Business Insurance, Cyber, Loss Estimation and More! Leave with ideas on how your organization can take advantage of the opportunities being created. Come join us for this very hot topic!

Moderator: Jon-Michael Kowall

Speakers:

Andy Kearns, Director, Business Development, American Family Insurance Group

Jon-Michael Kowall, ,

RT4: Let's Get Efficient: Meetings and Presentation Design

Roundtable - 11/11/2020, 4:00:00 PM - 5:00:00 PM, Level of Knowledge:

We all want the most success from our meetings and presentations. And that hinges on a number of key things: how the meeting is structured and how the presentation is designed. Let's discuss Adult Learning Theory and how it can apply to a meeting structure (both in a corporate setting and for a conference). Also, you don't need to be a graphic designer to enhance your slides / materials. Let's discuss how we can leverage Brain Rules to ensure we have the most impactful discussion / presentation

Moderator: Stephanie Rabin

Speakers:

Stephanie Rabin, ,

Thursday, November 12

GIRO SESSION AT ANNUAL

THIS WEBINAR IS FREE.

9:00 – 10:00 on Thursday, November 12

Annual Meeting attendees will have the opportunity to participate in this session (below) of the annual UK GIRO Conference to be held virtually, Nov. 2-13. This will be a one-hour session from 9:00 - 10:00 a.m. ET on Thursday, Nov. 12. Whether you are actually attending the Annual Meeting or not, CAS members will be able to attend this session at no cost, as the CAS is sponsoring it.

A TALE NOT TOLD BY AN IDIOT: EFFECTIVE COMMUNICATION THROUGH STORYTELLING

Stories have been around as long as humanity, yet many actuaries shy away from the narrative form. Why? Are we convinced that there's nothing dramatic about a reserve study? Can an actuary not play the hero?

Join us on our epic quest from the 6th day to the present day, as we explore how monsters, magic and mystery can transform your reports from turgid rags to C-suite.

Speakers:

Brian Fannin, CAS Research Actuary

Alex Marcuson, Managing Director, Marcuson Consulting Ltd

CS4: Building Dynamic Simulation Models

Concurrent Sessions - 11/12/2020, 10:00:00 AM - 11:15:00 AM, Level of Knowledge: Level 2: General knowledge of the subject (4-9 years)

This session describes the building of a dynamic simulation model for training purposes. The emphasis is that these models are home-grown and thus customized to the particular needs of your company. I will describe two separate simulation models, one for Personal Auto and one for Specialty Accounts. The actual models require four teams to go through three rounds of strategic pricing selections to attempt to grow while remaining profitable. This proposed interactive session will require the participants to run through one round of the personal auto model, after which we will calculate the results and discuss the apparent strategies of each team and the level of success for those strategies in relation to the other teams. By actually running through one round the session participants will get a feel for the power of this training tool.

Moderator: Wenwen Sun

Speakers:

L. Weltmann, ,

Lijuan Zhang, Global Manager of Pricing and Portfolio Management, Individual Personal Insurance, AIG

CS27: The Secret Life of Trend

Concurrent Sessions - 11/12/2020, 10:00:00 AM - 11:15:00 AM, Level of Knowledge: Level 2: General knowledge of the subject (4-9 years)

Actuaries use loglinear trend regularly. However, there are several aspects of trend that are not common knowledge among actuaries. For example, loglinear trend is actually a quasi-weighted average of the points being trended, which has ramifications for the way that trend is affected by uncertainty regarding the true point values. For example, the loglinear model for trend is not the only model for trend. Two alternatives involving random drift (Brownian motion) are presented, one with the point-by-point error associated with regression, and one without it, are presented.

Further, there are alternate algorithms for computing trend. Trend estimation is discussed in all three contexts and using those alternate algorithms, credibility formulas for trend are provided.

Moderator: John Pagliarulo

Speakers:

Joseph Boor, , Retired

Jeffery Smith, Vice President and Chief Actuary, NORCAL Mutual Insurance Company

CS7: COVID Has Exposed a Massive Secret about Home Insurance

Concurrent Sessions - 11/12/2020, 10:00:00 AM - 11:15:00 AM, Level of Knowledge: Level 1: No prior knowledge of the subject (0-3 years)

How much does occupancy change the risk profile for a home insurance policy? What does this mean for your company and why should you pay close attention? What is virtual occupancy and how can insurers leverage to gain a competitive advantage?

Until now, the impact of occupancy has been a theoretical supposition. But COVID has given us the gift of putting data behind that assumption.

This session will be shocking. And depending on your outlook, it is either alarming or exciting as you think about the future of home insurance and what this means to your company!

Jon-Michael Kowall, an insurance industry veteran, is focused on helping the industry adopt and leverage the massive amount of change happening in our world.

Moderator: Stephanie Rabin

Speakers:

Jon-Michael Kowall, ,
Andy Kearns, Director, Business Development, American Family Insurance Group
Orlando Machado, , Aviva PLC

CS14: Leading-Edge Property and Casualty-Related Research in Academia

Concurrent Sessions - 11/12/2020, 10:00:00 AM - 11:15:00 AM, Level of Knowledge:

This panel consists of several established actuarial scientists who will speak on recent development in academia. Topics of discussion range from telematics to peer-to-peer insurance.

1) Telematics technology: new actuarial techniques have been developed to explore how to integrate telematics information to better predict claims frequency.

2) Peer-to-peer (P2P) insurance: recent academic work has been developed to understand the actuarial theory underpinning the P2P insurance.

3) Hail risk: using a unique data that combines the exposure data from a major U.S. insurer and the radar data from a third-party vendor, the presenter will show the proposed method help improve claim management decisions for the insurer.

Moderator: Kenneth Hsu

Speakers:

Runhuan Feng, Professor, University of Illinois at Urbana-Champaign
Emiliano Valdez, Professor, University of Connecticut
Peng Shi, Associate Professor, University of Wisconsin - Madison

CS1: Actuarial Trivia Challenge

Concurrent Sessions - 11/12/2020, 10:00:00 AM - 11:15:00 AM, Level of Knowledge:

During this session by the Committee on Professionalism Education, participants will use their cell phones to participate in a real-time Trivia game! This session will qualify for Continuing Education in the area of Professionalism, as many questions will relate to Actuarial Standards of Practice, the US Qualification Standards, and/or the Code of Conduct.

Moderator: Ken Williams

Speakers:

Mike Speedling, Director, Internal Audit, AXIS Capital

Peter Royek, Senior Vice President & Actuary, Toa Reinsurance Company of America

Kendall Williams, Staff Actuary, Casualty Actuarial Society

CS10: Determining Vehicle Symbols Using Machine Learning Techniques

Concurrent Sessions - 11/12/2020, 12:15:00 PM - 1:30:00 PM, Level of Knowledge: Level 2: General knowledge of the subject (4-9 years)

Vehicle symbols (VS) are codes that group vehicles experiencing similar loss costs. Insurers writing motor liability coverage would typically charge vehicles belonging to the same VS group the same price — all policyholder characteristics being equal. In practice, a numeric code is assigned to a vehicle which corresponds to a loss relativity. Loss relativities typically vary by peril.

The presentation will:

- a) Briefly review current uses and implementations regarding VS.
- b) Show how to apply suitable clustering algorithms for mixed data on typical insurance data sets.
- c) Compare different approaches in terms of predictive performance and practical usability.

Moderator: Nick Klinka

Speakers:

Marco De Virgilis, , Allianz Global Corporate & Specialty SE

Giorgio Spedicato, Data Scientist, Leitha Srl (Unipol Group)

CS18: Pandemic Risk Management: Contingency Planning and Allocation

Concurrent Sessions - 11/12/2020, 12:15:00 PM - 1:30:00 PM, Level of Knowledge: Level 1: No prior knowledge of the subject (0-3 years)

Repeated history of pandemics such as SARS, Swine flu, Ebola, Zika and COVID-19 have shown that contingency planning for pandemics is a necessary component of risk management for all organizations in modern society. Today's technology allows us to use epidemiological models to predict the spread of infectious diseases in the similar way that meteorological models are used to forecast weather. Taking advantage of epidemic models, we can project the dynamics of demand and supply for medical resources at different phases of a pandemic. Such predictions provide quantitative bases for decision

makers of healthcare systems to understand the potential imbalance of supply and demand, and to address disparities of access to critical medical supply across different subsidiaries.

Moderator: Yitian Qin

Speakers:

Runhuan Feng, Professor, University of Illinois at Urbana-Champaign

Linfeng Zhang, , University of Illinois at Urbana-Champaign

Wing Fung Chong, ,

CS20: Social Inflation, What Does it Mean for the Insurance Industry and Credit Ratings

Concurrent Sessions - 11/12/2020, 12:15:00 PM - 1:30:00 PM, Level of Knowledge: Level 1: No prior knowledge of the subject (0-3 years)

Social Inflation is a term often used to describe various societal trends that may be associated with the increase of some insurance claims costs. In this presentation, learn about some of these trends and some of the factors that may be driving them. Also, learn about steps that insurers are taking to mitigate the impact of social inflation and how AM Best views the topic within the context of its rating process.

Moderator: Sarah Li

Speakers:

Chris Draghi, Senior Financial Analyst, AM Best

Greg Dickerson, Associate Director, AM Best

Christopher Sirota, Product Development Lead, ISO/Verisk

CS6: Climate Change and Risk Management - Extending the Time Horizon

Concurrent Sessions - 11/12/2020, 12:15:00 PM - 1:30:00 PM, Level of Knowledge:

A changing climate creates a risk to, and opportunity for, actuaries specializing in measuring risk of natural hazards. The use of traditional insurance ratemaking techniques, which typically consider risk over a time horizon of one year, may limit the effectiveness of actuaries in contributing to the growing field of climate change research. By extending the time horizon under study, and broadening the scope of their analysis, actuaries may be able to provide significant value in assessing the financial implications of this risk.

This session will present a case study that quantifies the current countrywide exposure to flooding, how it could be impacted by climate change, how this could affect the financial health of residential householders, whether it could impair their ability to meet their mortgage obligations, and what resulting effects might impact other parties. We hope to persuade attendees that actuaries can make significant contributions to climate change research.

Moderator: Ronald Kozlowski

Speakers:

David Evans, , Milliman, Inc.
Cody Webb, , Milliman, Inc.
Brandon Katz, Vice President, KatRisk LLC

CS24: The Financial Debt in Large Cities and Its Impact: Were Cities Ready for Covid-19?

Concurrent Sessions - 11/12/2020, 12:15:00 PM - 1:30:00 PM, Level of Knowledge: Level 1: No prior knowledge of the subject (0-3 years)

As more and more of America's cities go deeper into debt to fund unrecognized liabilities, a potential financial crisis looms.

This session will discuss:

- The large debt of America's largest cities
- Its impact on us as citizens and members of the insurance industry
- How big cities responded to the Great Recession?
- The impact of the Covid-19 recession and what needs to be done to mitigate it.

Moderator: Frank Gribbon

Speakers:

Chuck Reed, President, Retirement Security Initiative
Sheila Weinberg, Founder and CEO, Truth in Accounting

GS3: Grey Swans and Black Elephants: Why We Keep Getting Surprised and What We Can Learn from Them

General Session - 11/12/2020, 2:15:00 PM - 4:00:00 PM, Level of Knowledge: Level 1: No prior knowledge of the subject (0-3 years)

History is full of examples of crises that have caught society by surprise but which could be described as grey swans or black elephants, things which were unanticipated but in hindsight were hiding in plain sight. Examples include the oil crisis induced inflation of the 1970s, Hurricane Andrew and other large catastrophes in the 1990s, 9/11, the GFC in 2008, and most recently COVID-19. In each case the sudden onset of unforeseen risks led to serious financial turmoil and major changes in risk management. This session will explore a number of these examples, show what we have learned, and offer thoughts on how things may change from the current pandemic. The session will explore the response to 9/11, including how aggressive risk mitigation has significantly reduced the exposure to physical terrorism, although the threat may be evolving to cyber risks to our interconnected world. The session will conclude by identifying some lurking "black elephants" that should be on our radars.

Moderator: Stephen Lowe, Ron Kozlowski

Speakers:

Rade Musulin, Principal, Finity Consulting Pty Ltd
Stephen Lowe, , Retired
Leigh Wolfrom, Policy analyst, OECD