



Central Illinois
CPCU Society Chapter

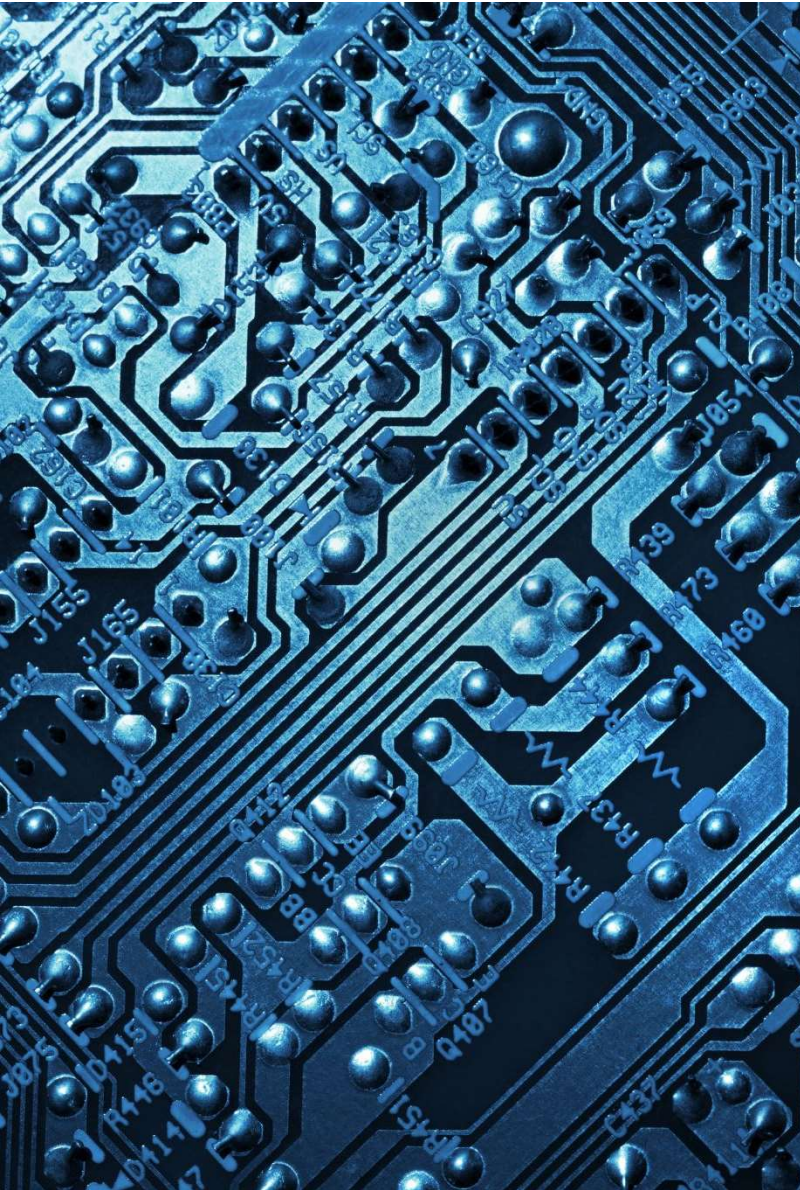
61st I-Day!





ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING IN P&C UNDERWRITING

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Learning objectives

- Artificial Intelligence and Machine Learning for Insurance Underwriting: what it is and is not
- P&C Underwriting's timely response to rapid change
- Closing the talent and technology infrastructure gap proactively to take advantage of emerging capabilities and market opportunities

Introduction



Risk Appetite = Underwriting

Agile → Timely Adaptation

Massive Data Development/Consumption

Right talent & technology infrastructure to respond

AI and ML in Underwriting

- Artificial Intelligence (AI): any type of computer software that engages in humanlike activities – including learning, planning and problem-solving.
- Machine Learning (ML): one of the most common types of AI in development for business purposes today--primarily used to process large amounts of data quickly. These types of AIs are algorithms that appear to “learn” over time.
- Deep learning (DL): a specific version of ML that relies on neural networks to engage in what is known as nonlinear reasoning--critical to performing more advanced functions such as fraud detection.

AI and ML in Underwriting

“Rather than serving as a replacement for human intelligence and ingenuity, artificial intelligence is generally seen as a supporting tool. Humans can use AI to game out possible consequences and streamline the decision-making process”

[Business News Daily](#)

Responding to rapid change

Example: Wildfire Underwriting

Standalone pictures is a thing of the past, today it is Aerial Imagery!

While we assess at issuance, how can we reassess when the vegetation grows back?

Accuracy is important for the insurer as much as personalization is important to the insured!

Challenges that need to be overcome include how to consume large amounts of data to make decisions quickly.

Where do we save this data? What is the retention period?



Closing the talent and technology infrastructure gap



- Like any industrial revolution, AI/ML will force or is already making some tasks redundant. AI/ML is NOT forcing humans out of work but pushing to creating **knowledge-based economy** to create increased automation for a better way of life.
- Roles of the order of an underwriting analyst, product manager, or a traditional file Underwriter will evolve into being able to consume more system-generated data than insured application completed form!

AI and ML for Insurance Underwriting: what it is and is not

“Artificial intelligence will create more wealth than it destroys, but it will not be equitably distributed, especially at first. The changes will be felt subliminally and not overtly”.

[Business News Daily](#)

Workflow Automation Software



Workflow automation: technology to automate time-consuming, manual work



Rule-based logic to automate many common business processes



Saves money, boosts productivity and improves employees' work experience



Aim to improve and speed up everyday business tasks, as well as to minimize human error



As legacy jobs will morph with AI/ML, many new opportunities will be created leading to a workforce that will become more specialized and require a higher number of skills which automation can't (yet) do well – like creativity, problem-solving, and other qualitative skills

Many any of these jobs will require a more advanced, technical skill set.. new baseline!



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Thank you!!

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