



Article from

## **Predictive Analytics and Futurism**

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# The First SOA Annual Predictive Analytics Symposium—A Recommended Investment! (Whether or Not Your Employer Pays for It)

By Dave Snell

Think back to when you decided to become an actuary. The required education was probably a huge time and dollar commitment, but most of us would agree that it was an excellent investment.

Actuaries rank near the top of most lists for the best job in the U.S. We enjoy a profession that offers high wages, pleasant and nontoxic working conditions, and a lot of satisfaction that what we do helps millions of families enjoy a more secure and enjoyable future.

However, we can't afford to be too complacent! A new wave of professionals, the data scientists, are pushing actuaries from those coveted top spots on the Best Jobs lists. In fact, the *Harvard Business Review* called Data Scientist "The Sexiest Job of the 21st Century" (October 2012). The good news, though, is that you can be both a data scientist and an actuary—a match that can ensure (or perhaps, insure?) your continued market value in a world becoming increasingly dependent upon predictive analytics.

We are all seeing flyers, emails and other advertisements for commercial conferences on predictive analytics (PA), big data, predictive models, data analytics and similar titles that promise wonderful returns if you attend them. Unfortunately, my colleagues and I come back complaining that we had to sit through dozens of sessions to find even one potential application to insurance. What if there were an entire conference, with dozens of sessions, all focused on ways to help you, as an actuary, capitalize on this PA explosion?

Now, there is—and it is sponsored by the Society of Actuaries! Furthermore, it was organized in collaboration with the Predictive Analytics and Futurism section (PAF) council and friends of the council.

This September 14–15, in Chicago, the SOA will host the first annual Predictive Analytics Symposium. It will have multiple tracks for PA so that you can choose to follow the management route, the beginning or intermediate practitioner route, or the advanced PA techie route. A manager might feel "I don't want to have to become a techie again, but I want to understand how PA can help my company in my specific interest area" (e.g., life, health, general insurance, ERM, etc.). A midlevel or newer actuary might want to dive in and become literate (or more knowledgeable) on the most cost- and time-effective ways to get productive with a classification and regression tree (CART) or a random forest. A person already using PA might want to learn the cutting-edge techniques (Deep Learning with Tensor Flow, advanced distribution choices, etc.). Alternatively, a person strong in one aspect of PA but wanting to delve into both the breadth and depth of PA can choose to mix and match throughout the conference.

Hopefully, your employer will see the tremendous value here and fund your trip to Chicago (easy access and not quite as pricey as some other areas of the country). But what if you have to pay for it yourself? I realize I am writing to a group of six-figure earners who sometimes balk at the \$25 per year section membership if not paid by their employer, but let's get real here. This is a great investment—no matter who makes it.

You will come away with ideas and with immediate applications from peers across the globe who are focused on the same financial risks that you are. This is not a Predictive Analytics World (PAW) conference where you learn how to manufacture a part or design an autonomous car. It is strictly for insurance and related financial risk applications.



The keynote speakers will be actuaries or chief data analytics officers from insurance companies you know and respect. The sessions will be conducted by actuaries who have learned to be successful in the PA space or data scientists who work with actuaries. Several of the speakers will be PAF section members who have utilized PA for specific insurance applications.

We are planning about three dozen sessions, arranged in three (or four) concurrent tracks. These will cover introductory topics such as how PA can help you in life, health, general insurance and other specialty areas (you attend the sessions that interest you), and progress all the way to the cutting edge of Deep Learning Neural Networks (how to use TensorFlow to write your own applications) and the wonders of machine learning. They should appeal to the manager who wants to know how to build a data analytics team, to the actuary who wants to move into this exciting new area (at various levels: running models, building models, managing others who run or build models) and to experienced practitioners who want to learn the latest and greatest extensions to further their expertise. We are bringing this all together under one roof, so to speak, so that you can find and network with actuaries who share interests in very special application areas.

This issue is timed to reach you a month earlier than before (June instead of July), and it should coincide with the registration

information and long list of session titles and descriptions. Please check for the announcement from the SOA. Our section is providing a large group of presenters, and they are being supplemented with noted experts from North America and Europe (so far . . . we are still recruiting more presenters) to bring actuaries together for a PA experience specifically for actuaries. My first draft of this article went for six pages of session titles and descriptions, but it would have been out of date by the time it reached you. Please check out the conference details when you receive them.

Oh, yes, and one more thing: this is not meant to be a substitute for the SOA Annual Meeting, the Health Meeting, Life and Annuity Symposium, Valuation Actuaries Meeting or any of the other fine conferences you may attend. We want you to supplement whatever education you have been experiencing with something new and exciting and immediately useful that will put the actuary back on top of the best jobs lists. Take note, *Harvard Technology Review*: The actuaries are taking over the PA space for financial services! ■



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