January 21, 2014 --- Portland Actuarial Club Luncheon

Title: Genetic Algorithms: What They Are and Why You Want to Know About Them

Speaker(s):   Brian Charles Grossmiller, FSA, MAAA, FCA

When: Tuesday, January 21, 2014 from noon to 1:30pm
Where: Heathman Hotel – Broadway Room, 1001 SW Broadway Portland, OR 97205
RSVP: Please RSVP by

<p style="text-align:center;color:red;font-weight:bold;">Thursday, January 16 at 2:00 pm</p>

on our website: www.PortlandActuarialClub.org/contact/rsvp
RSVP's received later then the deadline will incur an additional $5 fee.

Description:

Complexity science is a new way to grasp and manage reality—not the simple reality of dice and normal distributions that has been the study of traditional actuarial science, but the more complex reality in which we live and work: the reality of hurricanes and earthquakes, social reforms and economic upheavals, interest rate fluctuations, business cycles and health care expenditure trends.

This presentation will give an in-depth explanation of genetic algorithms, which effectively explore the solution space without examining every possibility by taking an initial set of solutions and iteratively combining the most successful. In addition, the presentation will cover tips to picking appropriate problems, as well as languages and tools that have been used successfully. They are ideal for a situation where:

1. There is no direct deterministic solution known; or, if there is, it is prohibitively difficult to implement in real time.
2. The number of possible solution sets is very large—too large to try them all in the desired time frame.
3. We can devise a sufficient scoring system or ranking scheme to quickly compare the relative value of any two possible solutions.

Brian Charles Grossmiller, FSA, MAAA, FCA

Brian Charles Grossmiller, FSA, MAAA, FCA is a Consulting Actuary with DeepView Solutions in Portland, Ore. There, Brian's primary responsibilities are conducting Pharmacy Audits and researching new methods to deliver enhanced value to DeepView's clients. Serving as the Vice Chair of the Society of Actuaries Actuary of the Future Section Council for 2014 and a former Secretary/Treasurer of the Forecasting & Futurism Section Council, Brian is an avid proponent of exploring Actuarial applications of emerging modeling & business decision support techniques.