

MSCS MESS

Department of Mathematics, Statistics, and Computer Science
St. Olaf College, Northfield, MN 55057
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Monday's Colloquium

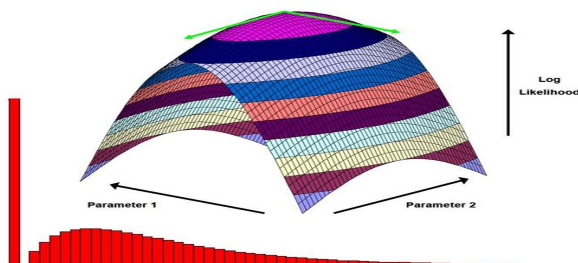
Predictive Modeling & Insurance 101: How Generalized Linear Models Transformed the Insurance Industry

Who: Nathan Hubbell & Chris Westermeyer

Where: RNS 310

When: Monday, Oct. 30th | 3:30 p.m.

About the talk: The use of predictive modeling and advanced analytics in insurance has grown significantly in recent years. One type of regression modeling widely used in insurance is generalized linear models (GLMs), a generalization of simple linear models. In our talk, we'll discuss the mathematics and usage of GLMs in insurance, as well as approaches used to help avoid modeling pitfalls such as overfitting, which occurs when a model does not correctly capture the underlying relationship between the predictors and response variable. The presenters for this talk are Nathan Hubbell and Zach Westermeyer. They both graduated from St. Olaf and currently work in actuarial roles at Travelers Insurance.



These Classes Look Cool!

Special MSCS Offerings:

Spring 2018

MSCS 264: Introduction to Data Science

Data is the currency of the modern world, and data science is a field that sits at the intersection between statistics and computer science. At its heart, data science is about gleaning information and making decisions from data; this provides a solid foundation to the most important data science tools. Students develop a common language for creating visualizations, wrangling with data, programming, producing reproducible research, and communicating results. Counts toward statistics concentration. Email Paul Roback for more info roback@stolaf.edu

EDUC 350: Teaching of Mathematics 5-12

In this course, you'll explore what it means to have an authentic experience in mathematics and acquire the skills needed to provide such experiences to students. (For example: what is a (mathematical) function, why should students care, and how can we help students derive and understand

(cont.) students derive and understand the concepts through their own work?) You'll learn about the current trends in mathematics education. You'll delve into existing curricula, as well as design your own lessons with a student-centered focus. The course also has a "field experience" component, where you'll spend time in a middle school or high school, seeing the classroom from a teacher's perspective. The course is open to junior and senior mathematics majors. If you're interested, please contact Ryota Matsuura matsuura@stolaf.edu.

Flaten Art's *Seeing Math*

What: Opening Reception
 Where: Flaten Art Museum
 When: Friday, Nov. 10th | 5:30 p.m.

On behalf of Jane Nelson, the MSCS department is invited to the Flaten Art Museum's next exhibition, *Seeing Math*. The show brings together six contemporary artists, Daniel Dean, Tracy Krumm, Emily Lynch-Victory, Ben Moren, Margaret Pezalla-Granlund, and Roman Verostko, who address a number of mathematical concepts including infinity, algorithms, geometry, and the fourth dimension. The Opening Reception will be lively, fun, and have good food, so stop by!

History in Context

On October 29, 1675, Gottfried Leibniz first used the integral sign as well as the 'd' for differential.

On October 30, 1735, Benjamin Franklin published *On the Usefulness of Mathematics*, his only published article on mathematics, in the Pennsylvania Gazette.

Weekly Theorem

Theorem Theorem– Theorem's prove nothing.

Proof. First, assume that a theorem exists. For contradiction's sake, assume that a theorem does not prove nothing. Then, surely, a theorem must prove something. However, something is clearly one over nothing, which is undefined. Thus a theorem cannot prove something, and must prove nothing as claimed. ■

To submit an article or event for publication in the mess, email nevilleq@stolaf.edu; to receive the Mess digitally each Friday, email habero1@stolaf.edu; visit <http://wp.stolaf.edu/mscs/mscs-mess/> for a digital archive of previous MSCS Mess issues.

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