

# CONFERENCE PROGRAM

## SHORT COURSES



### Thursday, February 19

#### SHORT COURSES

##### **Full-Day Short Courses** **8:00 a.m. – 5:30 p.m.**

##### **SCI—Practical Data Mining: Challenges and Solutions**

Instructor: Richard DeVeaux, Williams College

Large data sets (or Big Data) are becoming more common as our ability to collect and store data increases. Many new tools and methods are now available to both the experienced analyst and casual user. Unfortunately, there is a strong belief—due in large part to a series of popular Big Data books—that good results are guaranteed with just powerful algorithms and a lot of data. Instead, success is dependent on the skill and domain knowledge of the analyst and the quality and relevance of the data. However, by using principles of statistical engineering and sound statistical knowledge, the chance of success in these problems is significantly increased. Through a series of case studies, we will show how to be successful in Big Data problems. We will show applications of many current and popular algorithms, and when and where they are most successful.

## MENTORING PROGRAM

Interested in mentoring or being mentored? The intimate setting of CSP is ideal for matching a mentor with a mentee. After registering, you will receive information in your confirmation about how to participate in this unique program.

##### **SC2—From Statistical Consultant to Effective Leader**

Instructors: Ronald Snee, Snee Associates, LLC;  
Roger Hoerl, Union College

This workshop is designed to enhance the leadership skills of statisticians working in business, industry, and government. The goal is to help statisticians transition from being viewed as passive consultants to being viewed as proactive leaders within their organizations. Issues addressed include understanding what statistical leadership is and how it differs from consulting, why it is important to be viewed as leaders, and critical leadership skills required. As part of the course, each participant will develop a personal action plan to enhance their leadership in their own work environment.

##### **Morning Half-Day Short Courses** **8:00 a.m. – 12:00 p.m.**

##### **SC3—What Can We Learn from Software Engineers?**

Instructor: Paul Teetor, Quant Development LLC

Do any of the following problems sound familiar? Your organization is swimming in SAS or R code. You've saved numerous versions because you can't afford to lose anything. People are unsure of which version is best. Testing your code is difficult. You've cut-and-pasted your code so often you're seeing the same parts over and over. Everyone does their work differently, and people can't share code easily. The code is now so convoluted that newcomers cannot understand it. The thought of major changes makes your head hurt.

Software engineers have spent decades dealing with these problems, and the result is a body of best practices for managing software. These best practices are an art and not well known outside the discipline. This course will explain the techniques of software