

# Business Forecasting: Techniques, Best Practices & Application Using Forecast Pro



September 11-13, 2019  
San Francisco, California USA

 forecast pro®

You will leave this comprehensive three-day educational course with an understanding of forecasting techniques, including how they work and how to apply them in a real business environment. The seminar surveys the most **commonly used business forecasting methods**, explains how they work conceptually, discusses their pros and cons, and demonstrates best practices for implementing them in a real-world environment using Forecast Pro.

During the **hands-on workshops**, you will have the opportunity to solve your forecasting challenges by applying what you have learned using state-of-the-art Forecast Pro software under the guidance of our experienced instructors Eric Stellwagen, CEO and co-founder, and Sarah Darin, Senior Consultant at Business Forecast Systems, Inc.

The seminar also provides a great opportunity to **network with your peers** to discover how they've solved problems similar to your own and to compare notes on forecasting practices. You will be able to make valuable connections with other Forecast Pro users during breaks, lunches and at Wednesday evening's cocktail reception which provides a relaxing environment for socializing after the first day of the seminar concludes.

## Who Should Attend?

The seminar is valuable for anyone whose job responsibilities include preparing or analyzing forecasts; some prior knowledge of statistics is helpful but not essential.

[www.forecastpro.com](http://www.forecastpro.com)

## About the Instructors

**Eric Stellwagen** is the co-founder of Business Forecast Systems, Inc. (BFS) and the co-author of the Forecast Pro software product line. With more than 30 years of expertise in the field, he regularly presents workshops and publishes on the topic of business forecasting, and is widely recognized as a leading educator on the subject. Drawing upon his extensive consulting experience helping organizations to address their forecasting challenges, Eric infuses his classes with practical approaches and uses real-world data to illustrate concepts. In addition to working with leading firms—including Coca-Cola, Kraft, Merck, Nabisco, Owens-Corning and Verizon—he has presented workshops for a variety of organizations, has served on the board of directors of the IIF (International Institute of Forecasters) for 12 years and is now serving on the practitioner advisory board of Foresight: The International Journal of Applied Forecasting.



**Sarah Darin** has 20 years of experience with statistical consulting, sales forecasting, regression modeling and marketing analytics. Sarah holds a Master's of Science in Statistics from the University of Chicago, where she also served as a Lecturer. She has consulted for clients across a broad range of industries—including Consumer Packaged Goods, Telecommunications, Technology, Retail, Automotive and Finance—and was Vice President of Consulting Services at Nielsen where she focused on custom analytic solutions. Sarah's ability to understand and explain statistical concepts in the context of real-world, messy data makes her an ideal instructor for this seminar. Sarah received her undergraduate degree in Applied Mathematics from Harvard University.

## Venue

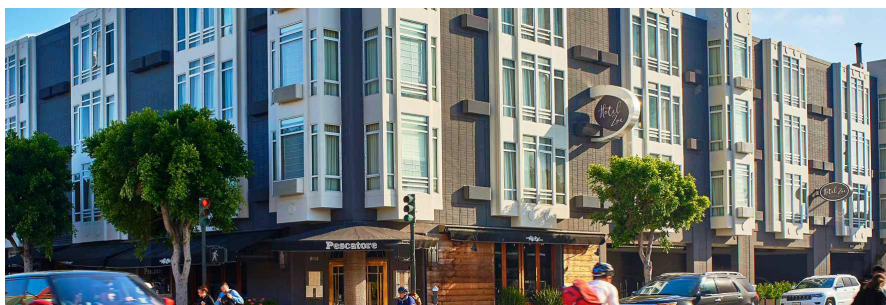
### Hotel Zoe

425 North Point Street  
San Francisco, CA 94133

[www.hotelzoesf.com](http://www.hotelzoesf.com)

Hotel Direct: (415) 561-1100  
Reservations: (800) 648-4626

The seminar will be held at Hotel Zoe which is located in the popular Fisherman's Wharf district of the city near Pier 39. Attendees can reserve rooms at the hotel at the discounted rate of \$279 per night until August 21, 2019. Reservations can be made online by [clicking here](#) or via phone by calling (800) 648-4626 and using the code **BFORECASTING**.



## Seminar Hours

**Wednesday, September 11: 9 am to 5 pm**

**Thursday, September 12: 9 am to 5 pm**

**Friday, September 13: 9 am to 3:30 pm**

Lunch is provided daily.

A cocktail reception will be held on Wednesday evening, providing a relaxing environment for socializing after the first day of the seminar.

# Seminar Agenda

## Day One: 9 am to 5 pm

### Introduction to Forecasting

A broad overview of business forecasting and its various uses within the organization. Topics include approaches to forecasting, features of data, the role of judgment, selection of appropriate forecasting methods for varied data sets and resources for forecasters.

### Components of Data

An in-depth look at the different components found in time series data including trends, seasonal patterns, business cycles, trading-day variations, interventions (events) and noise. Discussion includes the forms the components can take, spotting local vs. global components, interpretation of business cycle indicators and the use of decomposition routines.

### Exponential Smoothing

A survey of exponential smoothing techniques with particular emphasis on the Holt-Winters family of models and Croston's intermittent demand model. Topics include the pros and cons of using these models, when they are best used, how they work, identifying model components, parameter optimization and model diagnosis.

### Forecast Accuracy and Evaluation

A detailed look at evaluating the accuracy of forecasting methods. Topics include the distinction between within-sample and out-of-sample errors, a survey of error measurement statistics, a summary of findings from forecasting competitions, and an explanation of how to use both real-time tracking reports and simulations as predictors of model performance.

### Workshop 1

This first hands-on session familiarizes attendees with the use of the Forecast Pro software package as they are guided through sample exercises applying the ideas discussed during the lectures.

## Day One Evening: Cocktail Reception

## Day Two: 9 am to 5 pm

### Box-Jenkins (ARIMA) Models

An exploration into the use of ARIMA models for business forecasting. Topics include the advantages/disadvantages of using these models, how and when they should be applied, automatic identification procedures and model diagnostics.

### Event-Index Models

Event-index models extend the functionality of exponential smoothing models by providing adjustments for promotions, strikes and other non-calendar based events. This session addresses how these models work, how and when they should be used, and how to customize their design to best suit your needs.

## Day Two (cont.): 9 am to 5 pm

### Large-Scale Forecasting

Approaches for focusing on critical items when forecasting large volumes of data. Topics include evaluating and forecasting SKU data, filtering and ABC (Pareto) classification, outlier detection and correction, exception reporting and measuring accuracy across multiple time series.

### Multiple-Level Forecasting

This session explores hierarchical forecasting techniques. Topics include the need for forecasting at various levels, product vs. geographical hierarchies, reconciliation strategies, top-down vs. bottom-up approaches, the use of proportional allocation and adjustment for seasonality.

### Workshop 2

In this session, attendees are guided through forecasting exercises and have time to work with their own data with the help of the instructors.

## Day Three: 9 am to 3:30 pm

### New Product Forecasting

This session explores various approaches for forecasting new products. Topics include the pros and cons of different methods based on a product's classification and a review of popular methods including item supersession, forecast by analogy and the Bass diffusion model.

### Dynamic Regression

A detailed look into the ins and outs of regression forecasting. Topics include when regression models are best applied, how to build the models, ordinary least squares, leading indicators, lagged variables, Cochrane-Orcutt models, hypothesis testing and the use of "dummy" variables.

### Workshop 3

This final session consists of a regression example after which attendees have time to work with their own data.



**Seminar attendees are eligible  
to receive a discount of up to  
\$1,000 USD when licensing  
Forecast Pro Software**

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# REGISTRATION FORM

## Business Forecasting: Techniques, Best Practices & Application Using Forecast Pro

September 11-13, 2019 ❖ San Francisco, California USA

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Country: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

**REGISTER BY  
JULY 31, 2019  
AND SAVE!**

### Registration Fees:

☐ One Attendee.....\$1,395

or

☐ One Attendee with Early Bird Discount (by July 31, 2019) .....\$1,295

or

☐ One Attendee with Team Discount.....\$1,095 \_\_\_\_\_

Sign up 3 or more attendees at the same time and pay only \$1,095 per attendee.  
Team Discount cannot be combined with any other discount. Names of the other  
attendees must be listed below to receive this price:

#1 \_\_\_\_\_ #2 \_\_\_\_\_ TOTAL \_\_\_\_\_

### Payment Method: (payment in full is required at the time of registration)

☐ Check attached

☐ Visa ☐ MasterCard ☐ American Express

Card # \_\_\_\_\_ Expiration date: \_\_\_\_\_ Security Code: \_\_\_\_\_

Signature: \_\_\_\_\_

### Cancellation Policy:

The seminar is limited in size and we ask that if you must cancel to please inform us as soon as possible. Attendees may receive a full refund if cancellation is made 30 days or more prior to the start of the seminar. Attendees who cancel 14-30 days prior to the start date may receive a refund of the registration fee paid minus a \$150 service charge. Registrants who fail to attend or cancel less than 14 days before the start date are not entitled to receive a refund. Personnel substitutions may be made at any time.

**Mail to:**  
Business Forecast Systems  
68 Leonard Street  
Belmont, MA 02478 USA

**Fax Form to:**  
617-484-9219  
**or Call:**  
617-484-5050

**E-mail:**  
info@forecastpro.com  
**Web:**  
www.forecastpro.com

(Please fill out one form per attendee, copy if necessary)