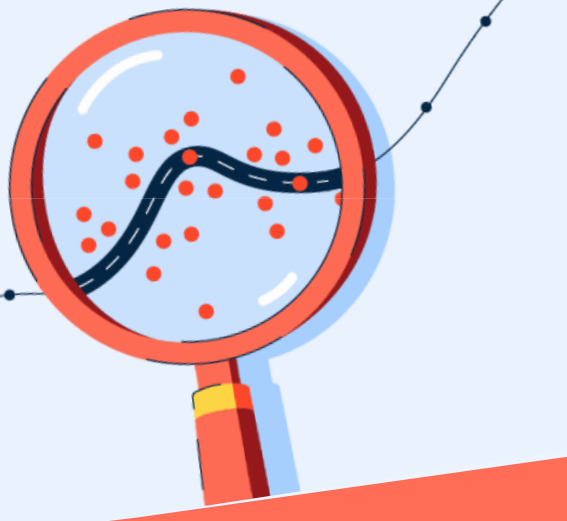
Forecasting with Generalised Additive Models (GAMs) in R



Instructor

Nicola Rennie

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Register for free...

21 FEBRUARY 2024

14.00-16.00 GMT Time

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Who is the training for?

1. Anyone who is interested in extending their knowledge beyond simple regression models and learning more about generalised additive models.
2. Newcomers to the field of generalised additive models who want to understand their importance and relevance in forecasting.
3. Academics, students, data scientists, researchers, and practitioners in the field who are working with data containing complex nonlinear relationships.
4. People who want to learn how to implement generalised additive models using R.

Learning objectives

By the end of the workshop, participants will:

1. know what generalised additive models are;
2. understand why and when they might be appropriate for certain types of data;
3. be able to fit and evaluate GAMs using the {mgcv} package in R;
4. understand how to interpret the output from fitted models.

Prerequisites

1. Basic knowledge of R.
2. Basic knowledge of statistics and linear modelling.

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Outline of the session

1. This session will provide an overview of generalised additive models (GAMs), demonstrate the practical aspects of fitting such models, and describe how to evaluate and interpret different them.
2. Live demonstrations and hands-on coding exercises will give participants the opportunity to practice implementing models using R.

Outline of the lab sessions

1. Introduction to the data and the {mgcv} package (15 minutes)
2. Fitting and evaluate GAMs using the {mgcv} package (15 minutes)
3. Forecasting using GAMs (15 minutes)

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