## Accuracy - Lesson overview

Understanding model accuracy equips us with the ability to **create reliable models** that can be applied to various problems.

In this lesson, we'll learn about **model accuracy metrics** and how to use these to **assess our models**. We'll uncover **common challenges to model accuracy**, such as bias, variance, overfitting, and underfitting, and explore strategies to address these obstacles. Finally, we will learn how to use **polynomial trend lines** to find the best fit for our data. By the end of this lesson, you will be able to assess the accuracy of models and apply techniques to improve the fit of models to our data.

## **Learning objectives**

- Understand the importance of a model accuracy assessment and its role in reliable predictions and decision-making.
- Know how to calculate and interpret residuals, residual plots, and accuracy metrics for evaluating model performance.
- Understand common challenges to model accuracy, including bias, variance, overfitting, and underfitting, and learn strategies to address them.
- Understand and evaluate polynomial trend lines and explore how these relate to overfitting and underfitting.





