Profile image for Andrew Ng

Andrew Ng

Welcome to Machine Learning! This week, we introduce the core idea of teaching a computer to learn concepts using data—without being explicitly programmed.

We are going to start by covering linear regression with one variable. Linear regression predicts a real-valued output based on an input value. We discuss the application of linear regression to housing price prediction, present the notion of a cost function, and introduce the gradient descent method for learning.

We’ll also have optional lessons that provide a refresher on linear algebra concepts. Basic understanding of linear algebra is necessary for the rest of the course, especially as we begin to cover models with multiple variables. If you feel confident in your understanding of linear algebra, feel free to take a break or help other students out in the forums.