*Welcome to the introduction to machine learning lesson!*

Machine learning is creating rapid and exciting changes across all levels of society.

* It is the engine behind the recent advancements in industries such as autonomous vehicles.
* It allows for more accurate and rapid translation of the text into hundreds of languages.
* It powers the AI assistants you might find in your home.
* It can help improve worker safety.
* It can speed up drug design.

Machine learning is a complex subject area. Our goal in this lesson is to introduce you to some of the most common terms and ideas used in machine learning. I will then walk you through the different steps involved in machine learning and finish with a series of examples that use machine learning to solve real-world situations.

Let's look at how the lesson outline.

**Lesson Outline**

This lesson is divided into the following sections:

* First, we'll discuss what machine learning is, common terminology, and common components involved in creating a machine learning project.
* Next, we'll step into the shoes of a machine learning practitioner. Machine learning involves using trained models to generate predictions and detect patterns from data. To understand the process, we'll break down the different steps involved and examine a common process that applies to the majority of machine learning projects.
* Finally, we'll take you through three examples using the steps we described to solve real-life scenarios that might be faced by machine learning practitioners.

