Through the remainder of the lesson, we will be walking through 3 different case study examples of machine learning tasks actually solving problems in the real world.

* **Supervised learning**
  + Using machine learning to predict housing prices in a neighborhood based on lot size and number of bedrooms
* **Unsupervised learning**
  + Using machine learning to isolate micro-genres of books by analyzing the wording on the back cover description.
* **Deep neural network**
  + While this type of task is beyond the scope of this lesson, we wanted to show you the power and versatility of modern machine learning. You will see how it can be used to analyze raw images from lab video footage from security cameras, trying to detect chemical spills.