

## Part 1. Your machine-learning rig

Learning to parallel park a car for the first time is typically an intimidating challenge. The first few days are spent getting familiar with the buttons, assisting cameras, and engine sensitivity. Machine learning and the TensorFlow library follow a similar curriculum. Before applying state-of-the-art strategies for solving face detection or stock-market predictions, you must first tinker with your tools.

There are two aspects to establishing a reputable machine-learning rig. First, as covered in [chapter 1](#), you must understand the lingo and theory of machine learning. Researchers have manifested precise terminology and formulations into the literature for a common way to communicate in this field, so we'd better do the same to avoid confusion. Second, [chapter 2](#) covers everything you need to know to start operating TensorFlow. Samurai have katanas, musicians have instruments, and machine-learning practitioners have TensorFlow.