“Why would I need a data scientist?”

I frequently get asked this by others who don’t understand what I do. I typically explain that there are two general types of things that data scientists do. First, I explain that data scientists produce insights or information from data. This may be as simple as a report of what happened in the past or as complex as a prediction of what might happen in the future. Data scientists may be involved in producing charts, performing statistical analyses, building dashboards, training machine learning models, or developing algorithms, but the purpose is to create (or uncover) understanding that a business can act on.

Second, I explain that data scientists may automate existing processes so that a machine or computer can do what a person once did, usually to increase the efficiency of an organization and lower costs.

I then explain that a data scientist might be involved in both the steps of creating information and automating a process in order to produce business value. For example, a data scientist may train an algorithm to recognize skin cancer, which can be incorporated in an app. This not only creates information about how a machine can identify cancer, but automates the detection of cancer.

How do you explain what you do?