The Importance of Distributed Judgment in Building Predictive Machine-Learning Models

Abstract

AI/ML model building process is generally considered a well-structured task wherein judgment is needed towards the end of the pipeline after predictions are made. We believe that the role of judgment is grossly underestimated in the model-building process and argue that judgment is an important component throughout the different stages of model building process. Our goal is to show that various judgments are needed in each stage of the model building process (input data-model building and validation, prediction, and decision). In addition, we explain the effects of poor judgment during the upstream activities in model building on the downstream activities of making prediction and decisions.