

Abstract

Artificial Neural Networks (ANNs) is one of those artificial intelligence methods that has been around since the 60s, that one occasionally hears about, but where the demanded expertise makes it out of reach for most people. Imagine for a second, that any developer with just limited Java experience could apply ANNs to any given modeling problem. That is exactly what AGFACAND allows.

A Generic Framework for Automatic Configuration of Artificial Neural Networks for Data Modeling (AGFACAND) is a highly automated framework with well-proven technologies that work together to create a user-friendly experience. The framework allows application of ANNs to any type of modeling problem. AGFACAND has been applied to weather forecasting, electrical load forecasting, indoor temperature forecasting and greenhouse climate prediction. In all cases AGFACAND outperformed previously obtained results that used state of the art methodology. The automation from AGFACAND takes the human out of the loop and thereby removes the influence from human preference, experience or errors.