

## **Behavioral Analysis of Artificial Neural Networks**

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Our approach is to set up a series of experiments in which Artificial Neural Networks are put through a variety of tasks intended to measure changes in their behavior due to minute changes. These include: variations in their architectures, hyperparameters, input orientation, and types of images. Our goal is to understand the "black box" of ANNs through thorough and accurate analysis of their responses under a variety of conditions.

Keywords: Artificial Neural Networks, image classification, hyperparameter tuning.