

Bayesian Neural Networks

Ilya Zharikov, Roman Isachenko, Artem Bochkarev

Abstract

The recent advances in deep learning allow us to solve really hard real word problems with high accuracy. What these methods lack is interpretability of the model and uncertainty guarantees for the predictions. Bayesian framework allows to solve both this two issues, and with recent development in variational inference technique it is possible to take the best of two worlds and implement bayesian neural network. Our project is dedicated to testing different priors for neurons weight and exploring advantages and disadvantages of bayesian approach in deep learning.

Introduction

References