

Lecture 2.

## **Bayesian Deep learning**

In recent years, Deep Learning models have been successfully integrated into the Bayesian Inference framework. That allows us to start a new line of machine learning research, that is related to generative modeling and new regularization techniques. In this lecture, we will go through basic concepts of scalable variational inference and also will discuss several examples of Bayesian deep learning models e.g. variational autoencoder and variational dropout.