Scoring Methods

Dirichlet Methods
(Softmax/categorical)

Simple Softmax
- Hendrycks & Gimpel (2017)[1]
- Hendrycks et al. (2019)[1,2]

Calibration
- Guo et al. (2017)[1]
- ODIN - Liang et al. (2018)[1,2], Hsu et al. (2020)
- Ren et al. (2019)[2]

Classification with Rejection
- Mohseni et al. (2020)[2]
- Geifman & ElYaniv (2017)
- DeVries & Taylor (2018)[1]

Prior Networks
- Malinin & Gales (2018, 2019)[1,2]

Evidential DL
- Sensoy et al. (2018)[1]

Density- & Distance-based methods

Gaussian Mixtures (GMM)
- Lee et al. (2018)[1]
- DDU – Mukhoti et al. (2021)

RBF Networks
- DUQ – van Amersfoort et al. (2020)[1]
- SNGP – Liu et al. (2020)[1]

BNN approximations
part of

Bayesian Methods
Prior distribution

sampling-based

Variational Inference[1]
- Kingma & Welling (2013)
- Kingma et al. (2015)
- Bayes by Backprop – Blundell et al. (2015)
- SWAG – Maddox et al. (2019)[1]

Laplace approximations[1]

MCDropout

Deep Ensembles

Gaussian Processes (GP)

Bayesian Neural Networks (BNN)

- Gal & Ghahramani (2016)[1]
- Kendall & Gal (2017)
- DropConnect - Mobiny et al. (2019)
- McClure & Kriegeskorte (2017)

- Lakshminarayanan et al. (2017)[1]

[1] Code available

[2] OOD data required for training