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## Uncertainty Quantification in Neural Networks: Methods and Considerations

*lundi 27 novembre 2023 16:30 (15 minutes)*

In this talk, we delve into the complexities of uncertainty quantification for neural networks. Model predictions inherently come with uncertainties that arise from several factors: stochastic outcomes, the randomness of training data samples, and the inherent variability of the training process itself. Through the lens of a regression problem, we will unpack these factors and provide a pragmatic framework to understand and quantify uncertainty effectively. Furthermore, we will discuss various considerations and pitfalls associated with using popular approaches such as Monte Carlo dropout and Deep Ensembles.

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