Neural statistician

- A generative model that learns a global context variable from the whole dataset as the support set
- Time-consuming when the model iterates over the support set

Variational Homoencoder

- An extension to Neural statistician where only a subset of the total data from each class is used to infer the local context variable
- It is mentioned in the paper of meta amortized inference paper that the prior of the global context variable is over-restricted
- Compared to our method, there is no clear separation between context and target sets in each episode of the training

Neural processes

- This is a regression model that learns the distribution of the function X -> Y.
- Not a generative model.
- This work mainly focuses on learning generative functions, where both X and Y in context data are seen in the training

Meta Amortized Variational Inference

- Similar to our current model
- Generative model

ML-PIP

- Similar to NP that it learns the distribution of functions
- Not a generative model
- Instead of learning a global context variable, it gets context variables for different classes

ML with Shared Amortized VI

- Similar to NP and ML-PIP
- Not a generative model
- The inferred context variable is used as the parameter for target data

Titsias_InformationTheoreticalMLwithGP

- Interprete MAML from the perspective of VIB
- The appendix gives a detailed derivation of the lower bound of VIB in meta-learning

Do_LearningToLearnWithVIBforDG

- This paper uses ML in VIB on supervised models