Paper Review

Summary:

In this paper, the authors propose a novel method for task-aware variational adversarial active learning that both exploits the structure of the task and identifies difficult data points. Their

Their method builds upon VAAL and deploys an improved version of Learning Loss to estimate loss rankings. They propose to loosen learning loss to make it more generalized and estimate ranking of the losses. These losses are then embedded in latent space representation. Then a discriminator evaluates the given ranking given the classification probability and asks for the most informative queries to be labeled.

Strengths:

This work achieves state of the art performance compared with VAAL. The authors used ablation studies to confirm each of the major modules are useful. Moreover, they determined the "relevancy" of input through the "learning-to-rank" function, where it is more efficient to compute and sufficient enough for active task learning.

Weaknesses:

The grammar errors make the paper more difficult to understand.