

Figure 1: Performance (Test Accuracy) of MAML, MetaSGD, MetaLSTM and MetaLSTM ++ on Omniglot and tieredImageNet datasets for one shot and five shot settings.

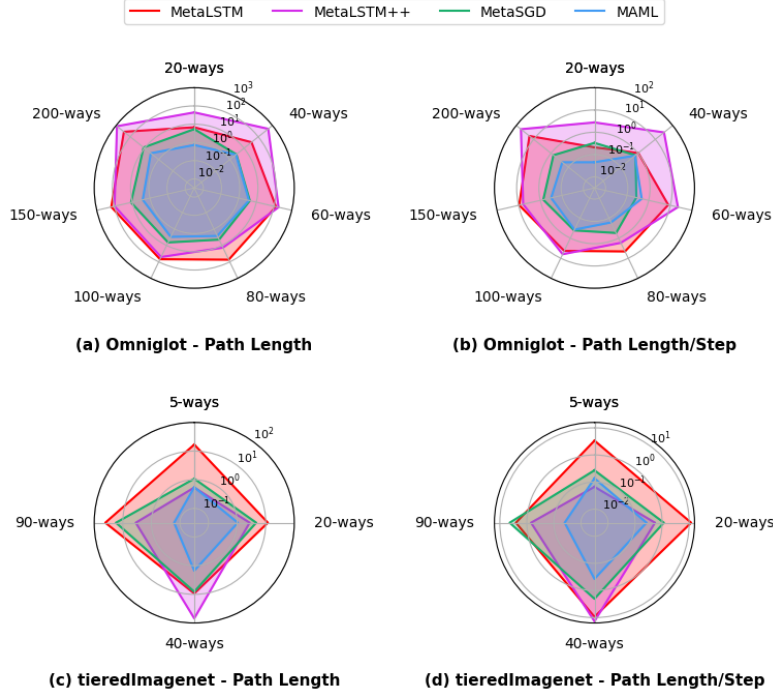


Figure 2 : Average path length and Average path length per adaptation step traveled by MAML, MetaSGD, MetaLSTM and MetaLSTM++ during adaptation across 300 tasks in 1 shot setting.

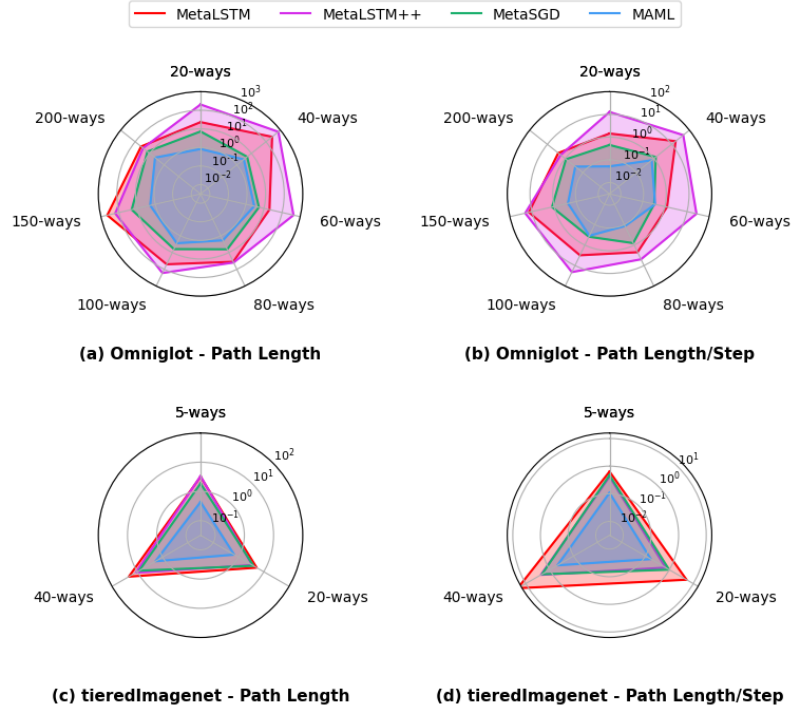


Figure 3: Average path length and Average path length per adaptation step traveled by MAML, MetaSGD, MetaLSTM and MetaLSTM++ during adaptation across 300 tasks in 5 shot setting.

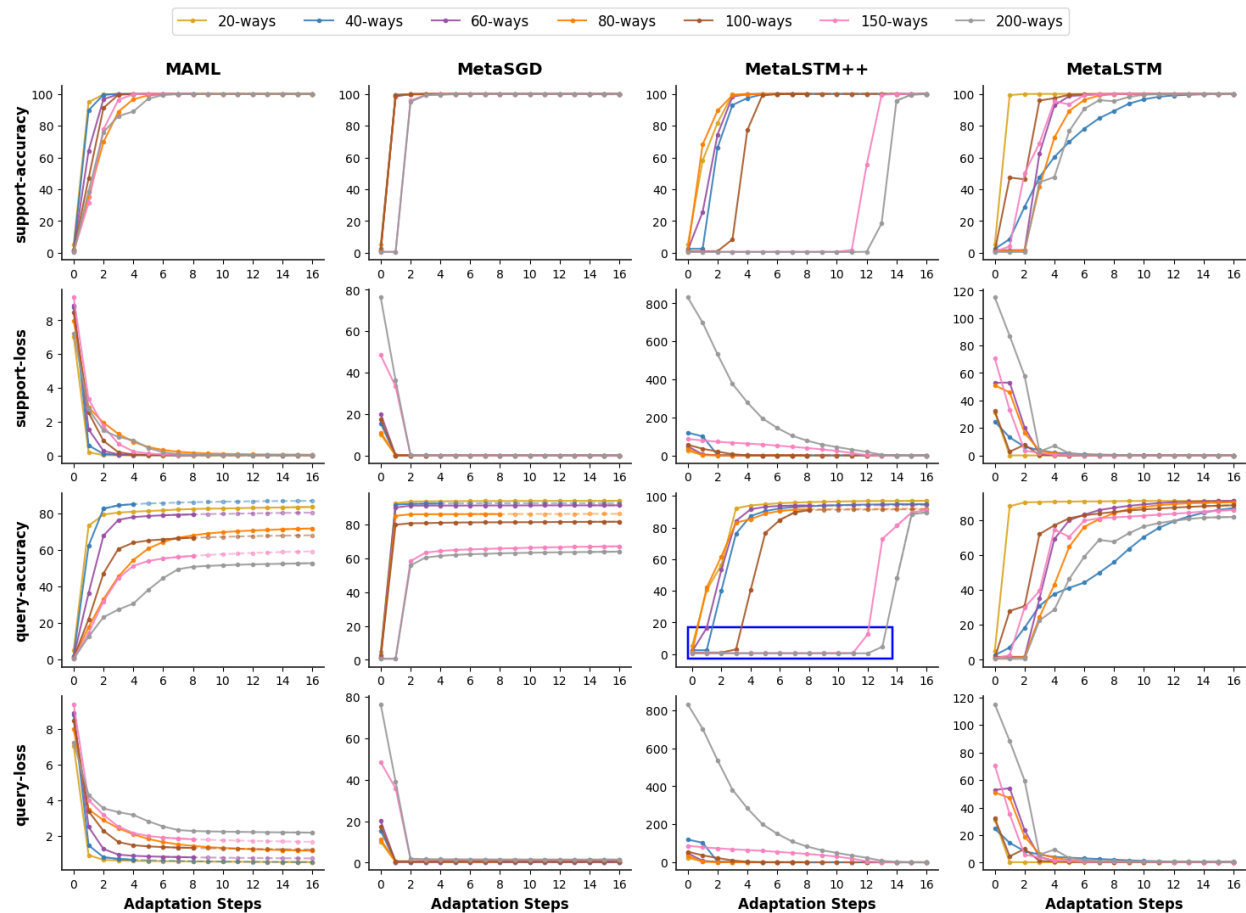


Figure 4a: Impact of adaptation assessed by support accuracy and loss and query accuracy and loss on MAML (Col-1), MetaSGD (Col-2), MetaLSTM++ (Col-3) and MetaLSTM (Col-4) across ways for one shot setting on Omniglot.

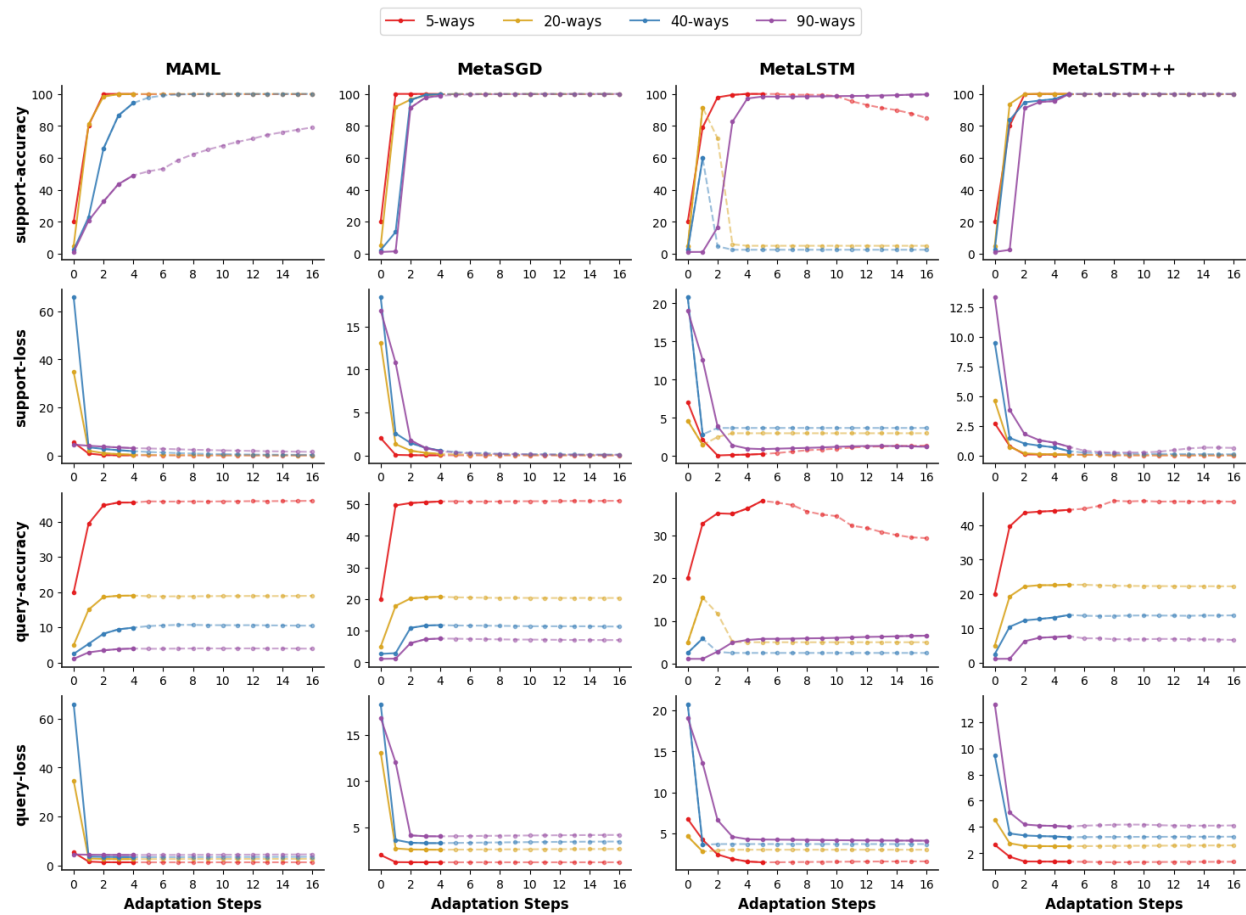


Figure 4b: Impact of adaptation assessed by support accuracy and loss and query accuracy and loss on MAML (Col-1), MetaSGD (Col-2), MetaLSTM (Col-3) and MetaLSTM++ (Col-4) across ways for one shot setting on tieredImageNet.

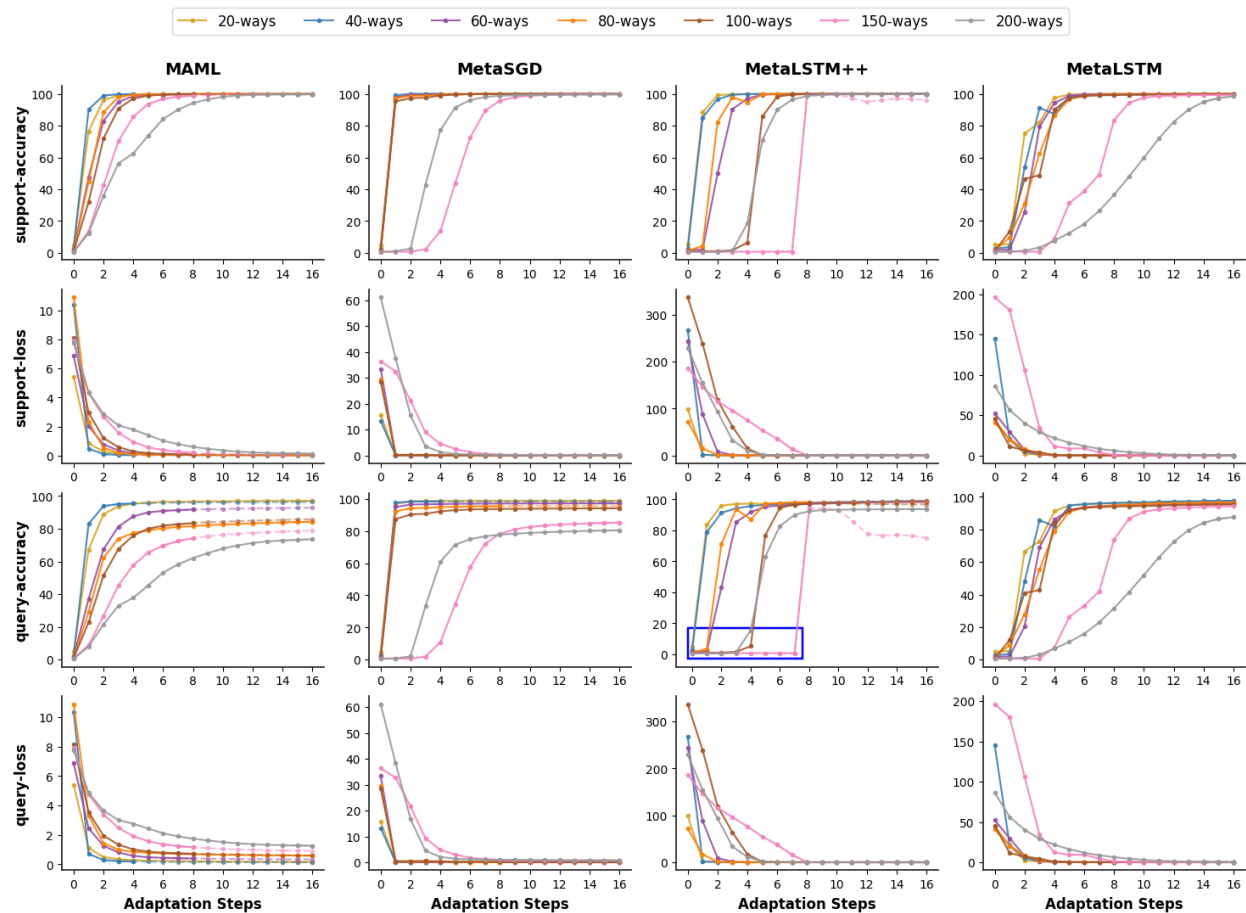


Figure 5a: Impact of adaptation assessed by support accuracy and loss and query accuracy and loss on MAML (Col-1), MetaSGD (Col-2), MetaLSTM++ (Col-3) and MetaLSTM (Col-4) across ways for five shot setting on Omniglot.

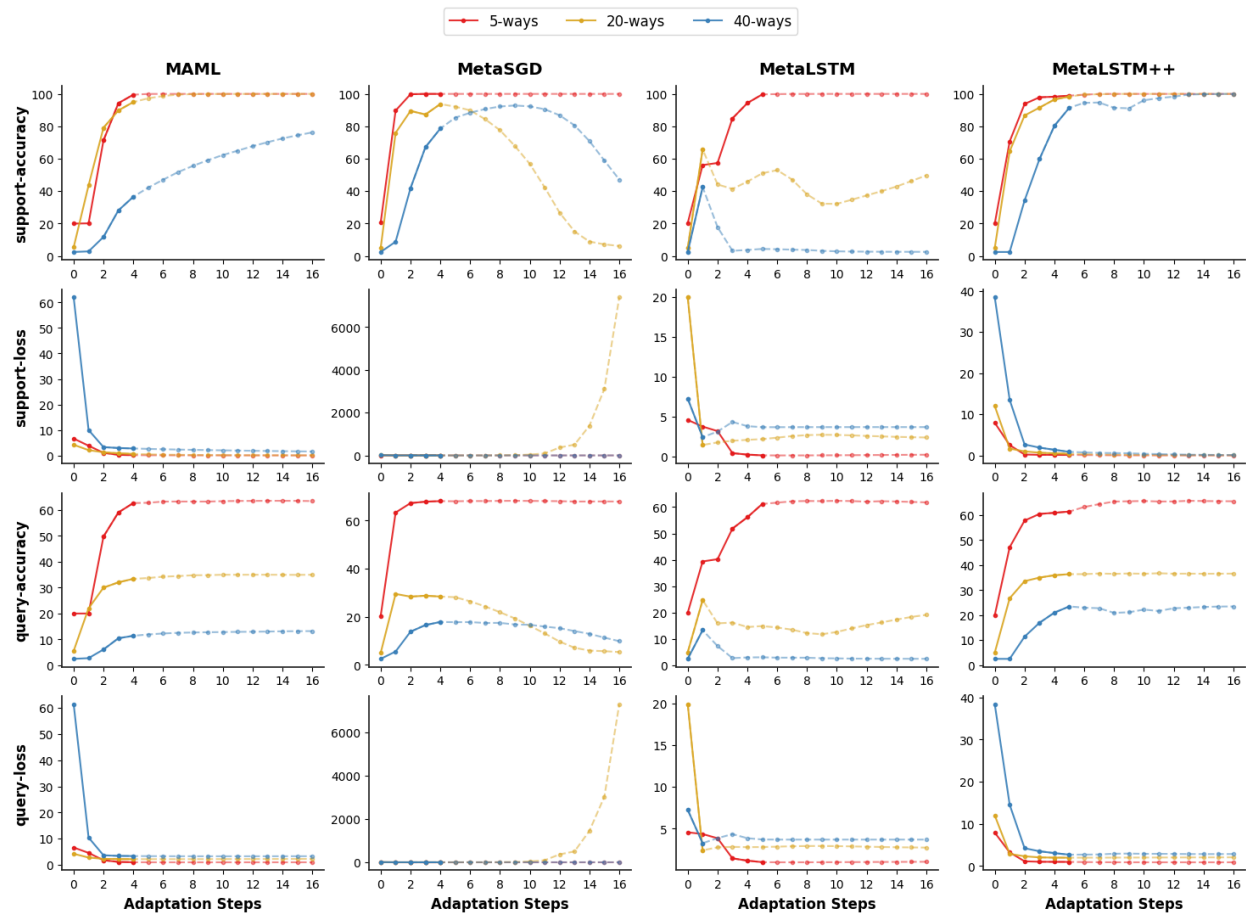


Figure 5b: Impact of adaptation assessed by support accuracy and loss and query accuracy and loss on MAML (Col-1), MetaSGD (Col-2), MetaLSTM (Col-3) and MetaLSTM++ (Col-4) across ways for five shot setting on tieredImageNet.

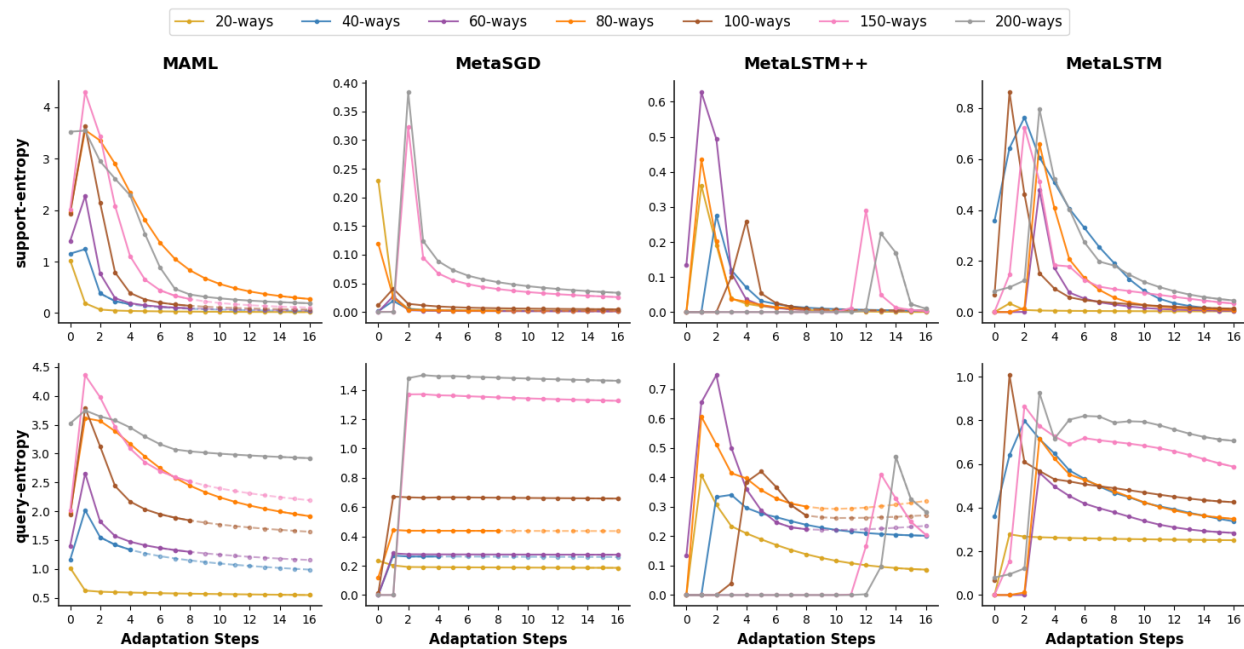


Figure 6a: Confidence of MAML (Col-1), MetaSGD (Col-2), MetaLSTM++ (Col-3) and MetaLSTM (Col-4) on their support and query predictions and its variation with respect to AS for Omniglot dataset in a one shot setting.

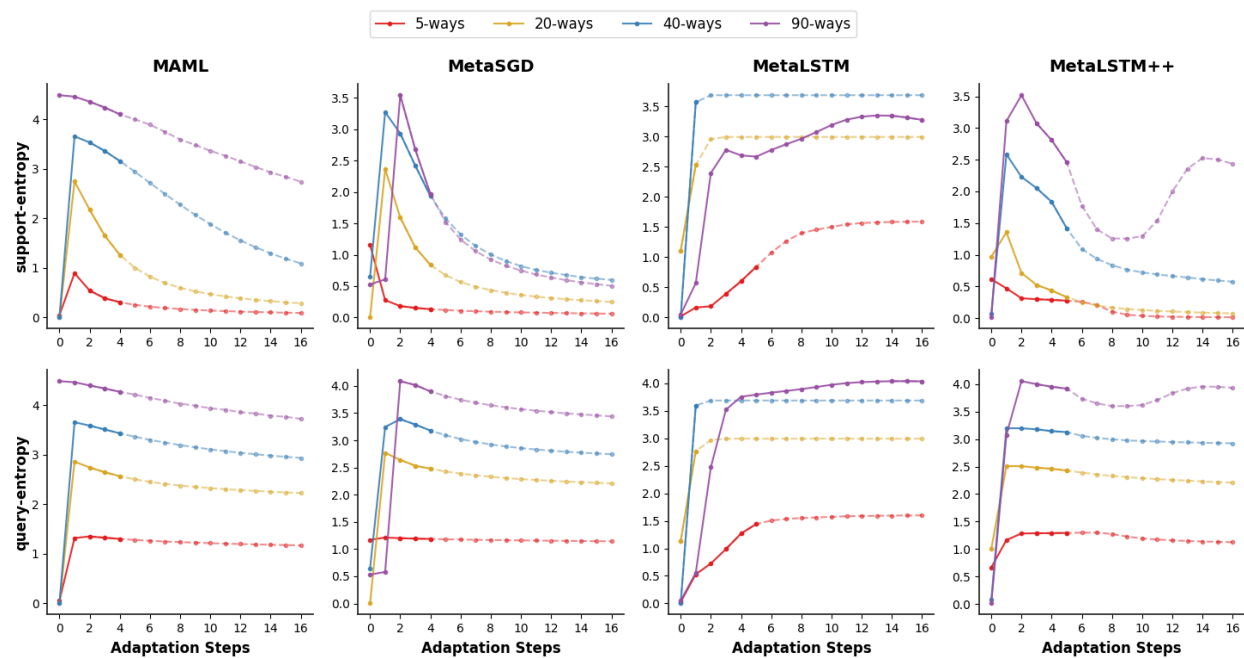


Figure 6b: Confidence of MAML (Col-1), MetaSGD (Col-2), MetaLSTM (Col-3) and MetaLSTM++ (Col-4) on their support and query predictions and its variation with respect to AS for tieredImageNet dataset in a one shot setting.

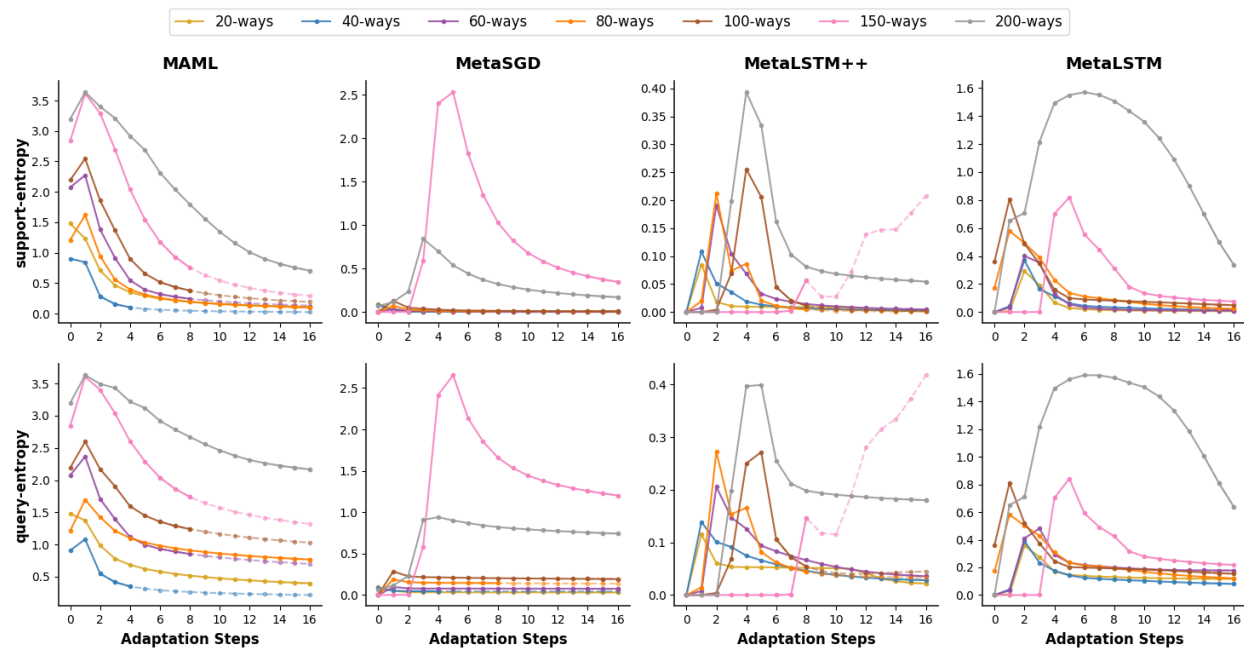


Figure 7 a: Confidence of MAML (Col-1), MetaSGD (Col-2), MetaLSTM++ (Col-3) and MetaLSTM (Col-4) on their support and query predictions and its variation with respect to AS for Omniglot dataset in a five shot setting.

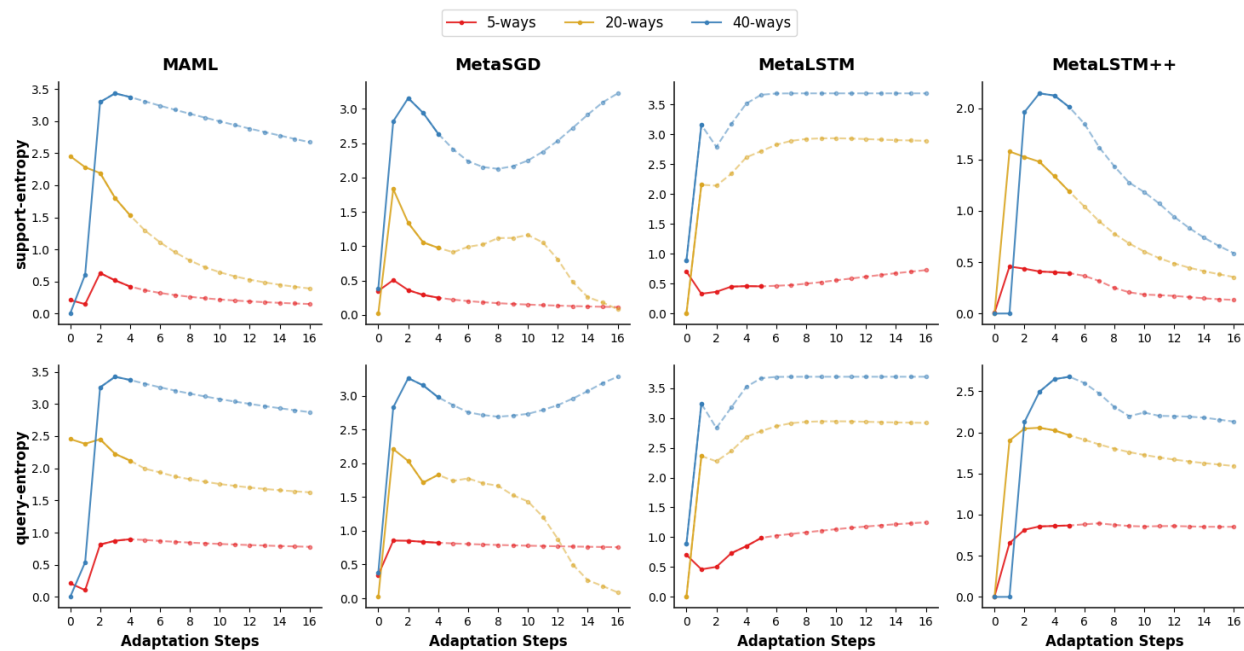


Figure 7 b: Confidence of MAML (Col-1), MetaSGD (Col-2), MetaLSTM (Col-3) and MetaLSTM++ (Col-4) on their support and query predictions and its variation with respect to AS for tieredImageNet dataset in a five shot setting.

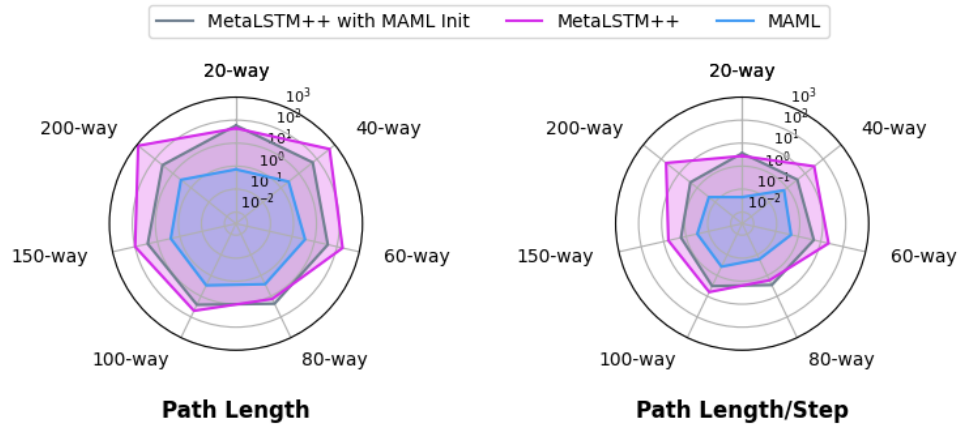


Figure 8: Average path length and Average path length per adaptation step traveled by MAML, MetaLSTM++ initialized with MAML, and MetaLSTM++ during adaptation across 300 tasks in 1 shot setting (R9 C13.1).

Comparison with Unicorn MAML (R3C11.1, R3C13, R9C13.4, R11C11.2, R11C12.2) :

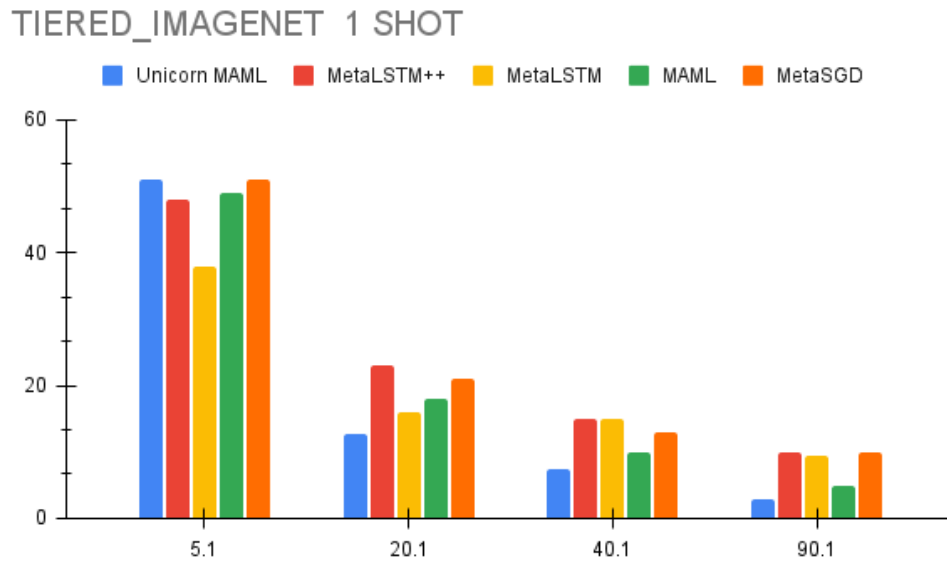


Figure 9: Performance of MAML, Unicorn-MAML, MetaSGD, MetaLSTM, MetaLSTM++ on 5, 20, 40 and 90 way 1 shot tieredImagenet. Results obtained after running original unicorn-code which supports tieredImagenet dataset. 5 way Unicorn-MAML results have been taken directly from original paper.

Note: All models and results are present in the google drive link given in setup and organization.