**Summary 1st: Prototypical Networks for Few-shot Learning**

Prototypes are the centroid that have a place with a particular bunch which by implication is the normal of the focus having a place with a particular group. This paper involved episodic learning working out with Prototypical Networks. Distance grid was one more observation which brought about execution improvement and as cosine distance isn't Bregman divergence so the paper involved squared form of Euclidean distance as a distance framework. The paper without giving any augmentations and without using the idea of meta learning gave a less difficult and proficient methodology, then, at that point, stretched out to the zero shot learning, and turned out the best in class results applied CUB-200.

**Summary 2nd: Learning to Compare: Relation Network for Few-Shot Learning**

Relation Network can characterize inconspicuous pictures just by working out the connection score of the inquiry pictures and the calculation requires a couple of models for preparing and doesn't need any update in the organization. At first the engineering depicted in the paper utilized 5 benchmarks utilizing just the normal and basic methodologies. At first pictures are encoded and afterward connected with the inquiry picture then the link is broken down and we get a score of it from an edge of 0 to 1. Later the paper depicted the limited explicit misfortune work. The paper offered the regular and fine methodology for zero shot learning

**Summary 3rd: Few-Shot Domain Adaptation with Polymorphic Transformers**

Paper proposes a polyformer which is a polymorphic transformer that can be placed in any pretrained model and with a tad of adjusting in the layer projecting the outcomes just by doing this will create great outcomes. Entertainer is gotten from model inserting of source space and is prepared on that before the undertaking head. This paper proposes an answer for profound neural organization for involving them for few shot advancing as ployformer is great in space transformation. Paper additionally shows the viability of this model for two undertaking division and tried on clinical pictures dataset and accordingly beats the pattern in this specific situation.