Incremental Few-Shot Learning with Attention Attractor Networks

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- Testing on only new classes in "few-shot" is not natural.
- Incremental few-shot learning: learn new classes on top of old classes. No access to the old data.
- At each test episode, learn a linear classifier until convergence.
- Attention over base classes to form attractor regularizers.
- At the end of the episode, test on a query set of both base and novel.
- Use recurrent backprop (RBP) instead of truncated BPTT for learning more stable loss functions.
- Learned regularizers significantly reduce class interference.

