Supplementary

Table S1 Parameter setting of meta learner

Type	Filter	Stride	Padding
Convolution I	3×3×32	1×1	Same
Max pooling I	2×2×32	2×2	Valid
Convolution II	3×3×32	1×1	Same
Max pooling II	2×2×32	2×2	Valid
Convolution III	3×3×32	1×1	Same
Max pooling III	2×2×32	2×2	Valid
Convolution IV	3×3×32	1×1	Same
Max pooling IV	2×2×32	2×2	Valid
Full connection	288×1	N/A	N/A
Output	2×1	N/A	N/A

N/A, not available.

Table S2 New terms for MAML

Term	Detail
Support set	Each support set contains N categories, each of which contains K samples
Query set	Every query set contains a set number of remaining samples from the selected N categories
Meta-training set	The meta-training set (D_{tr}) contains multiple meta-training tasks, each of which includes a support set D_s and a query set D_q
Meta-testing set	The meta-testing set (D_{te}) constitutes the meta-testing task, whose support sets are all unseen categories, and the query set is applied to test the performance of few-shot model

MAML, model-agnostic meta-learning.