Multimodal Model Agnostic Meta-Learning via Task-Aware Modulation
Data Sample

Ground Truth
Tanh

Sinusoid

Data Sample

Ground Truth

Absolute Value

Tanh

Data Sample

Ground Truth
\[ \theta_1 \quad \theta_2 \quad \theta_3 \]

Sinusoid

Tanh

Data Sample

Ground Truth

MAML (1-mode)

MAML (3-mode)

Absolute Value
Task Network

\[ x \rightarrow \hat{y} \]
Task Network

\[
\{ x \} \quad \text{Samples} \\
\{ y \} \quad \times \ K
\]

Modulation Network

\[x\]

Task Network

\[\hat{y}\]
Evaluations: Regression
Evaluations: Regression

<table>
<thead>
<tr>
<th>Data Points</th>
<th>Ground Truth</th>
<th>MAML</th>
<th>MultiMAML</th>
<th>MMAML</th>
</tr>
</thead>
</table>

| MAML        | 1.668        |
| Ours        | 0.868        |
Evaluations: Reinforcement Learning

ProMP

Ours
Evaluations: Classification

(a) Omniglot  (b) Mini-ImageNet  (c) FC100  (d) CUB  (e) Aircraft
Evaluations: Classification

(a) Omniglot  (b) Mini-ImageNet  (c) FC100  (d) CUB  (e) Aircraft

<table>
<thead>
<tr>
<th></th>
<th>MAML</th>
<th>Ours</th>
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<tbody>
<tr>
<td></td>
<td>54.41%</td>
<td>60.83%</td>
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