Introduction

Analysis of two research lines of models

- Two research lines of models are complementary to each other.
- The parameter adaptation mechanism in meta-learning can provide more flexibility to alleviate unfitting issues of the neural process.
- The neural processes can help handle the heterogeneity challenge for MAML by using a small set of data instances as conditioning instead of encoding all the information into parameter set.
- Although it's promising to integrate two popular few-shot approaches together, the incompatible operations on the given small set of data instances is main obstacle.

Introduction

Proposed Approach: MetaFEND

- To address the aforementioned challenges, proposed a novel meta neural process network (MetaFEND) for emergent fake news detection.
- MetaFEND unifies the incompatible operation from meta-learning and neural process via simple yet novel simulated learning task,
  - whose goal is to adapt the parameters to better take advantage of given support data points as conditioning.