EFDOPara

🚀 Stop waiting, start training! Slash training times for geophysical neural operators on multi-GPU setups with our dynamic training strategy, without sacrificing accuracy.

1. 🛠️ Installation

> 💡 Pro tip: We recommend using `Anaconda` with `Mamba` for lightning-fast package installation!

1.1. Step 1: Get Mamba Up and Running

First, grab Mamba from the Mambaforge download page:

```
bash Miniforge3-Linux-x86_64.sh -b -p ${HOME}/miniforge
```

1.2. Step 2: Set Up Your Environment

Add these magic lines to your `~/.bashrc`:

```
# conda
if [ -f "${HOME}/miniforge/etc/profile.d/conda.sh" ]; then
    source "${HOME}/miniforge/etc/profile.d/conda.sh"
fi
# mamba
if [ -f "${HOME}/miniforge/etc/profile.d/mamba.sh" ]; then
    source "${HOME}/miniforge/etc/profile.d/mamba.sh"
fi

alias conda=mamba
```

1.3. Step 3: Create Your EFDO Environment

```
conda create -n torch python=3.11
conda activate torch
```

1.4. Step 4: Install Dependencies

```
# Install PyTorch with CUDA support
conda install pytorch torchvision torchaudio pytorch-cuda=11.7 -c pytorch -c nvidia

# Install other required packages
conda install torchinfo pyyaml numpy scipy pandas matplotlib jupyter notebook
pip install ray
```

1.5. Step 5: Get the Code

```
git clone https://github.com/CUG-EMI/EFDOPara
```