
Get Started

1. download dataset to ./data/
2. unzip dataset to filename ./data/lichess-chess-puzzle-transformed.csv
3. transform dataset with `python data/transform_data.py` (takes about ~20min)
4. train/test/save a model with `python -m chess_ml.train.Immitation` (takes more than ~20min)

Filestructure

- chess_ml
 - data:
 - * Environment.py: env handling board and rewards
 - * Rewards.py: reward functions
 - env:
 - * ChessNN.py: base class with wrappers for RL and legal move masking
 - * FeedForward.py: feed forward implementation of base class
 - train:
 - * Immitation.py: training routine immitation learning
 - * Reinforcement.py: training routine reinforcement learning
- data:
 - transform_data.py: transforms kaggle dataset to labeled dataset

TODO

- RL loop
- Immitation training