## Commands for Openspiel

To compile the C++ games and algorithms:

- cd build
- CXX=clang++
- cmake -DPython\_TARGET\_VERSION=3.6 -DCMAKE\_CXX\_COMPILER=clang++ ../open\_spiel
- make -j12 # The 12 here is the number of parallel processes used to build
- ctest -j12 # Run the tests to verify that the installation succeeded

To test run a game:

examples/example –game=nim

To get a list of all the game available:

• examples/example

To run a game using MCTS and human:

python3 open\_spiel/python/examples/mcts.py --game=nim --player1=mcts --player2=human

To run a game between Alpha Zero and human:

 python3 open\_spiel/python/examples/mcts.py --game=nim --player1=az --player2=human -az\_path=open\_spiel/python/examples/checkpoint/checkpoint-25

To save checkpoints for alpha zero algorithm:

• python3 open\_spiel/python/examples/nim\_alpha\_zero.py -path=open\_spiel/python/examples/checkpoint/

To perform analysis of the trained Alpha Zero algorithm:

python3 open\_spiel/python/algorithms/alpha\_zero/analysis.py
 -path=open\_spiel/python/examples/checkpoint/

Testing a game with Alpha Zero model:

python3 open\_spiel/python/algorithms/alpha\_zero/model\_test.py