

readme

First, install the dependencies with `pip install -r requirement.txt`

Then, run each script with `python3 dl_and_ul.py`. The script will generate the following files:

- `cell_id.png` shows the arrangement of cell IDs.
- `dl_grid_with_walk.png` shows the entire grid (containing 6 clusters) and the random walk path of the MS in the grid.
- `dl_handoff.csv` saves the list of handoff events in the downlink problem, sorted by time.
- `ul_msinit.png` shows the initial locations of the 100 MS.
- `ul_grid_with_walk.png` shows the entire grid and the random walk path of one MS in the grid.
 - By default, it is configured to show the 7th MS, but changing the `test_ms` variable in the script can show another MS path.
- `ul_handoff.csv` saves the list of handoff events in the uplink problem, sorted first by time then by MS ID.

`helper.py` doesn't need to be run, it contains helper functions for the scripts.