EXECUTION - python3 main.py -c <scenario yml name located in configs> -t <stage>
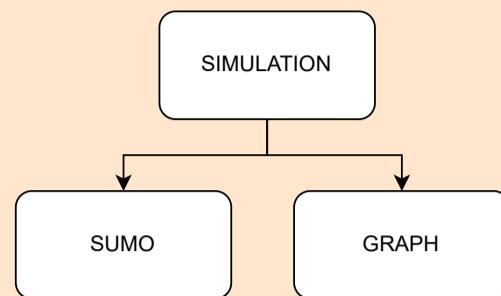
| | DENOTES PIPELINE STAGES (pipeline.py) (STAGE ON TOP, FILEPATH AT BOTTOM) |

| | DENOTES FLOW |

STAGE 1
MOBILITY DATA
GENERATION

SIMULATION

SUMO

GRAPH

SUMO (simulation/sumo/sumo_simulation.py)		GRAPH_GEN (simulation/graph/graph.py)
FILTER_USERS_POLYGON (simulation/sumo/filter_users_polygon.py)		WALK (simulation/graph/walk.py)
FILTER_USERS_RI_COUNT (simulation/sumo/filter_users_RI_count.py)		GRAPH_RAW_DATA (simulation/graph/gen_raw_user_data.py)

USER & SNIFFER DATA GENERATION

STAGE 2
DATA IDENTIFIER
GENERATION

GENERATE_USER_DATA (simulation/generate_user_data.py)		**user_data_<SCENARIO_NAME>.csv**
GENERATE_SNIFFER_DATA (simulation/generate_sniffer_data.py) (simulation/filter_sniffer_data.py)		**raw_sniffed_data_<SCENARIO_NAME>.csv**
FILTER_SNIFFER_DATA (simulation/filter_sniffer_data.py)		**sniffed_data_<SCENARIO_NAME>.csv**

STAGE 3
DATA
PROCESSING

AGGREGATION

| AGGREGATE
(tracing_algorithm/aggregation.py) | | **aggregated_id_<SCENARIO_NAME>.parquet**
aggregated_users_<SCENARIO_NAME>.parquet |

STAGE 4
TRACING
ALGORITHM

TRACING ALGORITHM

INTERMAP (tracing_algorithm/intermap.py)		**intermap_<SCENARIO_NAME>.npy**
INTRAMAP (tracing_algorithm/intramap.py)		**intramap_<SCENARIO_NAME>.npy**
REFINE_INTRAMAP (tracing_algorithm/refine_intramap.py)		**refined_intramap_<SCENARIO_NAME>.npy**
INTRA_FILTER (tracing_algorithm/intra_filter.py)		**filtered_intramap_<SCENARIO_NAME>.npy**

STAGE 5

RECONSTRUCTION

RECONSTRUCTION

RECONSTRUCTION_MULTI (reconstruction/reconstruction_multi.py)		**output/data/baseline_<protocol>_<SCENARIO_NAME>.csv** **output/data/multi_protocol_<SCENARIO_NAME>.csv**
RECONSTRUCTION_SINGLE (reconstruction/reconstruction_single.py)		**output/data/single_<protocol>_<SCENARIO_NAME>.csv**
PLOT (modules/plot_reconstruction.py)		**output/images/privacy_leakage_<SCENARIO_NAME>.pdf**