

Street View Panorama Images Acquisition

Multimodal Dataset Generation

2026/4/2

Panorama Photos from Google Street View

■ Run ValidPoints.m

- Loads SAGE file “.\data\mat\SelInd_xxx”
- Generate valid Rx positions for the chosen route

■ Run API_metadata_query.py

- Loads the valid Rx positions
- Queries unique panorama IDs from Google API to avoid downloading duplicates
- Save valid metadata (unique) from valid GPS data
 (“Rxvalid_metadata_dedup_pano.csv”)

■ Run Panorama_downloader.py (Requires Google API)

- Loads the unique valid metadata
- Download panorama, raw images for the unique panorama IDs (.jpg)

■ Run masterCSV_builder.m

- Creates CSV dataset file.

RxLon	RxLat	RxPos	TxLon	TxLat	d_2D	d_3D	dh_m	elev_deg	dh_over_d	bearing_de	bearing_si	bearing_cc	log10_d2D	log10_d3D	PL	DS	ASD	ASA	Tx_height_m	Rx_height	isLoS_Tag
139.6374	35.44769	1037	139.6361	35.44592	228.1899	230.1927	30.3	7.563726	0.132784	210.3816	-0.50576	-0.86268	2.360195	2.363974	99.60533	9.39E-08	25.31645	58.89755	33	2.7	0
139.6373	35.44772	1040	139.6361	35.44592	228.0822	230.086	30.3	7.567254	0.132847	208.438	-0.47621	-0.87933	2.359991	2.363774	105.8462	1.44E-07	24.12178	73.25714	33	2.7	0