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Abstract

In [2], we systematically reviewed the Open Science practices followed in recent publications in the field of indoor positionng, analyzing all reference papers from the 2022 and 2023 editions of the International Conference on Indoor Positioning and Indoor Navigation (IPIN). That study underscored the need for wider adoption of those open practices, to enhance the transparency, reproducibility, replicability, and reliability of research outcomes of the field of indoor positioning. This document introduces in Table I the 34 datasets that were identified in [2] as containing open resources.

Index Terms

Localization, Positioning, Reproducibility, Open Data, Open Code, Open Materials

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TABLE I
LIST OF 34 IDENTIFIED DATASETS WITH OPEN RESOURCES

Dataset title	Open Data	Open Code	Open Material	Pub. year	Reference
RETSINA: Reproducibility and Experimentation Testbed for Signal-Strength Indoor Near Analysis	YES	YES	YES	2023	Baskin *et al.* [3]
Close-Range Indoor Proximity Detection for COVID-19 Exposure Notifications Using Smartphone Magnetometer Traces	YES	NO	YES	2023	Hyfte *et al.* [4]
SIMUL: Synchronized IMU Dataset of Walking People at Six Body Locations	YES	NO	NO	2023	Kastner *et al.* [5]
Simulation of machine learning inferences in real-time operating system to improve direction finding in an embedded environment	YES	YES	NO	2023	Nizharadze *et al.* [6]
Alternative Approach to Integrate GNSS Doppler in Kalman Filter for Smartphone Positioning	YES	NO	NO	2023	Agarwal *et al.* [7]
Error State Kalman Filter with Implicit Measurement Equations for Position Tracking of a Multi-Sensor System with IMU and LiDAR	YES	YES	NO	2023	Ernst *et al.* [8]
Time-based vs. Fingerprinting-based Positioning Using Artificial Neural Networks	YES	NO	NO	2023	Kirmaz *et al.* [9]
Multipath Delay Estimation in Complex Environments using Transformer	YES	NO	YES	2023	Ott *et al.* [10]
An empirical multi-wall NLOS ranging model for Wi-Fi RTT indoor positioning	YES	NO	YES	2023	Liang *et al.* [11]
Towards Quality Wi-Fi Synthetic Data for Indoor Positioning Evaluation	YES	YES	NO	2023	Pendão *et al.* [12]
Temporal Stability on Human Activity Recognition based on Wi-Fi CSI	YES	YES	NO	2023	Matey-Sanz *et al.* [13]
RSS Channel-Based Integration for BLE Fingerprinting Positioning	YES	NO	NO	2023	Aranda *et al.* [14]
Overcoming Radio Map Degradation in Wi-Fi-based Positioning Systems	YES	YES	NO	2023	Silva *et al.* [15]
Tightly Integrated Motion Classification and State Estimation in Foot-Mounted Navigation Systems	YES	YES	NO	2023	Skog *et al.* [16]
Let's Talk about k-NN for Indoor Positioning: Myths and Facts in RF-based Fingerprinting	YES	YES	NO	2023	Torres-Sospedra *et al.* [17]
Cooperative Localization Using Received Signal Strength and Least Squares Estimation Methods	YES	NO	NO	2023	Moayeri [18]
Unsupervised Analysis of Daily Routine Evolution for Elderly People Using Room-Level Localisation	YES	NO	NO	2023	Plaza *et al.* [19]
A dynamic model switching algorithm for WiFi fingerprinting indoor positioning	YES	NO	NO	2023	Feng *et al.* [20]
Indoor Positioning Methods Based on Dual Feet-Mounted IMUs With Distance Constraints	YES	NO	NO	2023	Ma *et al.* [21]
UJI Probes: Dataset of Wi-Fi Probe Requests	YES	NO	YES	2023	Bravenec *et al.* [22]
Pose Graph Optimization for a MAV Indoor Localization Fusing 5GNR TOA with an IMU	YES	NO	YES	2023	Kabiri *et al.* [23]
VI-SLAM2tag: Low-Effort Labeled Dataset Collection for Fingerprinting-Based Indoor Localization	YES	YES	YES	2022	Laska *et al.* [24]
SURIMI: Supervised Radio Map Augmentation with Deep Learning and a Generative Adversarial Network for Fingerprint-based Indoor Positioning	YES	YES	YES	2022	Quezada-Gaibor *et al.* [25]
Live RSSI Filtering for Indoor Positioning with Bluetooth Low-Energy	YES	NO	NO	2022	Danis [26]
A Survey on Artificial Intelligence for Pedestrian Navigation with Wearable Inertial Sensors	YES	NO	YES	2022	Fu *et al.* [27]
ONavi: Data-driven based Multi-sensor Fusion Positioning System in Indoor Environments	YES	YES	NO	2022	Lu *et al.* [28]
WiFi Based Distance Estimation Using Supervised Machine Learning	YES	NO	NO	2022	Kostas *et al.* [29]
Online IMU-Odometer Extrinsic Calibration Based on Visual-Inertial-Odometer Fusion for Ground Vehicles	YES	YES	YES	2022	Zhao *et al.* [30]
An Enhanced Visual SLAM Supported by the Integration of Plane Features for the Indoor Environment	YES	NO	NO	2022	Zi *et al.* [31]
The Semantic Point & Line SLAM for Indoor Dynamic Environment	YES	NO	YES	2022	Guo *et al.* [32]
A Geometric Deep Learning Framework for Accurate Indoor Localization	YES	NO	NO	2022	Luo *et al.* [33]
A WiFi Fingerprint Augmentation Method for 3-D Crowdsourced Indoor Positioning Systems	YES	NO	NO	2022	Dong *et al.* [34]
An Encoded LSTM Network Model for WiFi-based Indoor Positioning	YES	NO	NO	2022	Dong *et al.* [35]
A Framework for CSI-Based Indoor Localization with ID Convolutional Neural Networks	YES	NO	NO	2022	Wang *et al.* [36]

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