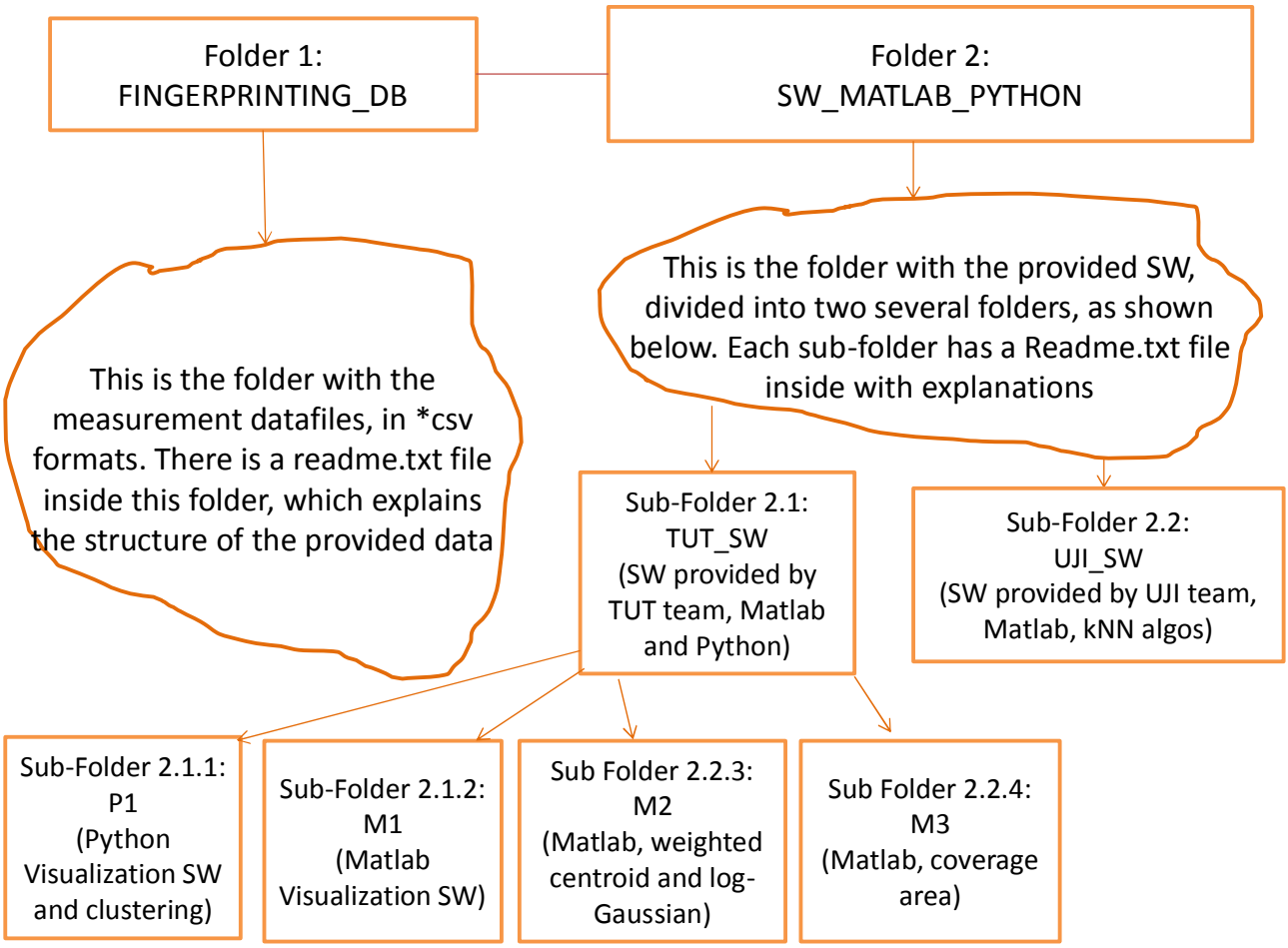
Crowdsourced WiFi database and benchmark software for indoor positioning

The measurement databases and the comprehensive benchmarking software are provided in two folders, one for the measurement data and one for the benchmark algorithms, according to the following structure:



Each sub-folder has an additional README*txt file inside to explain its use.

The measurement folder FINGERPRINTING_DB can be used independently of the SW analysis folder SW_MATLAB_PYTHON. The SW analysis folder is only provided as an add-on feature, to provide benchmark results and visualization tools. The SW analysis folder contains various implementations of indoor positioning algorithms developed by different researchers and on different SW platforms (i.e., Matlab and Python).

The SW files are licensed under the MIT license / X11 license. This documentation is licensed under CC0 license. Additional information is given in the README*txt files found in each sub-folder.

Request for citation: If you use the database or the software, please cite them as follows:

E.S. Lohan, J. Torres-Sospedra, P. Richter, H. Leppäkoski, J. Huerta, A. Cramariuc, "Crowdsourced WiFi-fingerprinting database and benchmark software for indoor positioning", Zenodo repository, DOI 10.5281/zenodo.889798

Additional references and contact information

[1] Cramariuc, H. Huttunen and E. S. Lohan, "Clustering benefits in mobile-centric WiFi positioning in multi-floor buildings," 2016 International Conference on Localization and GNSS (ICL-GNSS), Barcelona, 2016, pp. 1-6.doi: 10.1109/ICL-GNSS.2016.7533846

[2] Torres-Sospedra, J.; Montoliu, R.; Trilles, S.; Belmonte, O. & Huerta, J. Comprehensive Analysis of Distance and Similarity Measures for Wi-Fi Fingerprinting Indoor Positioning Systems. Expert Systems with Applications Vol. 42(23), pp. 9263-9278, 2015. http://dx.doi.org/10.1016/j.eswa.2015.08.013

[3] E.S. Lohan, J. Torres-Sospedra, H. Leppäkoski, P. Richter, Z. Peng, J. Huerta, "Wi-Fi crowdsourced fingerprinting dataset for indoor positioning" to appear in MDPI Data journal

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