**README file for the sequence-to-sequence and character-based OnHW datasets of the paper:**

[1] Felix Ott, David Rügamer, Lucas Heublein, Tim Hamann, Jens Barth, Bernd Bischl, and Christopher Mutschler. Benchmarking Online Sequence-to-Sequence and Character-based Handwriting Recognition from IMU-Enhanced Pens.


For each dataset, we publish the writer-dependent (dep) and writer-independent (indep) datasets each with 5-fold cross validation corresponding to the results presented in the paper [1]. The datasets are separated by folder as .zip files, each with five subfolders for the cross validation splits. Datasets with left-handed writers are denoted by an additional "_L" in the folder name. Additionally, we provide the publicly available IAM-OnDB [2] and VNOnDB [3] datasets, as we used different train/test splits for a writer-dependent and writer-independent evaluation. The file format of the data is *.pkl* or *.npy*.

The folder *OnHW-symobls_equations_(in)dep* contains the single character datasets, i.e., the *OnHW-symbols* (number and symbols), the split *OnHW-equations* dataset, and the combined case. The files are denoted by "_s", "_e" and "_es". The file "ids_info.txt" contains information about the person IDs for each train/test split.

The folder "images" contains all images used for the paper [1].


**References:**

[2] Marcus Liwicki and Horst Bunke. IAM-OnDB - an On-Line English Sentence Database Acquired from Handwritten Text on a Whiteboard. In Intl. Conf. on Document Analysis and Recognition (ICDAR), pages 956–961, Seoul, Korea, Aug. 2005.

[3] Hung Tuan Hguyen, Cuong Tuan Nguyen, and Masaki Nakagawa. ICFHR 2018 – Competition on Vietnamese Online Handwritten Text Recognition using HANDS-VNOnDB (VOHTR2018). Intl. Conf. on Frontiers in Handwriting Recognition (ICFHR), 2018.

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