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| S.no | Authors | Title | Publishing | Techniques/  methods | Pros | Cons |
| 1 | [Kyoung-Soub Lee](https://ieeexplore.ieee.org/author/37085494444); [Sanghoon Chae](https://ieeexplore.ieee.org/author/37085697835); [Hyung-Soon Park](https://ieeexplore.ieee.org/author/37334786700) | HAR based on Convolutional Neural Network | 2018 | CNN and SVM | -Sensor data is easy to collect on smartphone  -Low data processing is required | Percentage of activity recognition is low in upstairs  And downstairs |
| 2 | [Akbar Dehghani](https://arxiv.org/search/cs?searchtype=author&query=Dehghani%2C+A), [Tristan Glatard](https://arxiv.org/search/cs?searchtype=author&query=Glatard%2C+T), [Emad Shihab](https://arxiv.org/search/cs?searchtype=author&query=Shihab%2C+E) | Subject cross validation in HAR | 2019 | k-fold Cross-Validation | Artificially increase in the performance of recognizers by about 10% and even by 16% when overlapping windows are used | Overestimates the performance of HAR systems |
| 3. | [Zhenguo Shi](https://ieeexplore.ieee.org/author/37086297326); [J. Andrew Zhang](https://ieeexplore.ieee.org/author/37085894378); [Rithard Xu](https://ieeexplore.ieee.org/author/37413362200); [Gengfa Fang](https://ieeexplore.ieee.org/author/37286480000) | Human Activity Recognition Using Deep Learning Networks with Enhances Channel State information | 2018 | CSI,DLN-Ecsl,RNN | Device-free sensing with respect to wifi and walls | Background reduction and correlation feature enhancement modules need to be processed |
| 4 | Fabien Baradel, Christian Wolf, Julien Mille, Graham W. Taylor | Human Activity Recognition form Unstructured Feature points | 2018 | RNN | Processing requirements are very low | Can only recognize poses and not encompass many human activities |