

# Neural Architectures for Human Activity Recognition

## Summary:

This paper is mainly about the current state-of-the-art neural architecture for human activity recognition (HAR) based on wearable on-body sensors. The Author has firstly introduced the fundamental of HAR and then pointed out challenges that researchers face: Temporal feature extraction, detection of cross-channel relation and different performance of certain activity. Then, the author has introduced the state-of-the-art neural architecture and give an example. After that, he has written about Neural architecture search, which can help solve specific HAR problems. Thus, he can finally introduce Proposed NAS Search Space for sensor-based HAR.

## Pros:

1. Very detailed introduction of neural architectures for HAR.
2. Given example in 2.7 helps readers to understand the function of each step easier.

## Cons:

1. The structure of section 2 is not clear. If I understand the article correctly, "Local Temporal Feature Extraction", "Extraction of Cross-Channel Relations", "Capturing Global Temporal Context" and "Model evaluation" are 4 steps of "State-of-the-Art Neural Architecture". Arranging these 4 parts as parallel parts with others in section 2 is not clear for readers to understand.

## Suggestions:

1. The author can write about the structure of this paper in the section "introduction".
2. Rearranging section 2. 2.3, 2.4, 2.5 and 2.6 can be subsection of 2.2
3. The author can comment how he feels about the current technology and give his opinion of the future of this fields.