Towards high performance and efficient brain computer interface character speller : convolutional neural network based methods

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List of Publications

1. **Hongchang Shan**, Yu Liu, and Todor Stefanov,
"A Simple Convolutional Neural Network for Accurate P300 Detection and Character Spelling in Brain Computer Interface",
In *Proceedings of the 27th International Joint Conference on Artificial Intelligence (IJCAI'18)*, pp. 1604-1610, Stockholm, Sweeden, July 13-19, 2018.

2. **Hongchang Shan**, and Todor Stefanov,
"SLES: A Novel CNN-based Method for Sensor Reduction in P300 Speller,"
In *Proceedings of the 41st Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'19)*, pp. 3026-3031, Berlin, Germany, July 23-27, 2019.

3. **Hongchang Shan**, and Todor Stefanov,
"A Novel Sensor Selection Method based on Convolutional Neural Network for P300 Speller in Brain Computer Interface",
The 56th ACM/IEEE Design Automation Conference (DAC'19) WIP session, Las Vegas, NV, USA, June 2-6, 2019.

4. **Hongchang Shan**, Yu Liu, and Todor Stefanov,
"Ensemble of Convolutional Neural Networks for P300 Speller in Brain Computer Interface",
In *Proceedings of the 28th International Conference on Artificial Neural Networks (ICANN'19)*, pp. 376-394, Munich, Germany, September 17-19, 2019.

5. **Hongchang Shan**, Yu Liu, and Todor Stefanov,
"An Empirical Study on Sensor-aware Design of Convolutional Neural Networks for P300 Speller in Brain Computer Interface,"
In *Proceedings of "12th IEEE International Conference on Human System Interaction (IEEE HSI'19)"*, pp. 5-11, Richmond, Virginia, USA, June 25-27, 2019