神经信号处理调研

EEG 分类任务

1. emotion recognition dataset
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2. mental workload dataset
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3. motor imagery dataset
   [58] M. Tangermann et al., “Review of the BCI competition IV,” Front. Neurosci., vol. 6, no. JULY, pp. 1–31, 2012.

4. seizure detection dataset
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5. sleep stage scoring dataset
   [59] B. Kemp, A. H. Zwinderman, B. Tuk, H. A. C. Kamphuisen, and J. J. L. Oberyé, “Analysis of a sleep-dependent neuronal feedback loop: The slow-wave microcontinuity of the EEG,” IEEE Trans. Biomed. Eng., vol. 47, no. 9, pp. 1185–1194, 2000.
   [60] C. O’Reilly, N. Gosselin, J. Carrier, and T. Nielsen, “Montreal archive of sleep studies: An open- access resource for instrument benchmarking and exploratory research,” J. Sleep Res., vol. 23, no. 6, pp. 628–635, 2014.

适应不同任务的网络结构

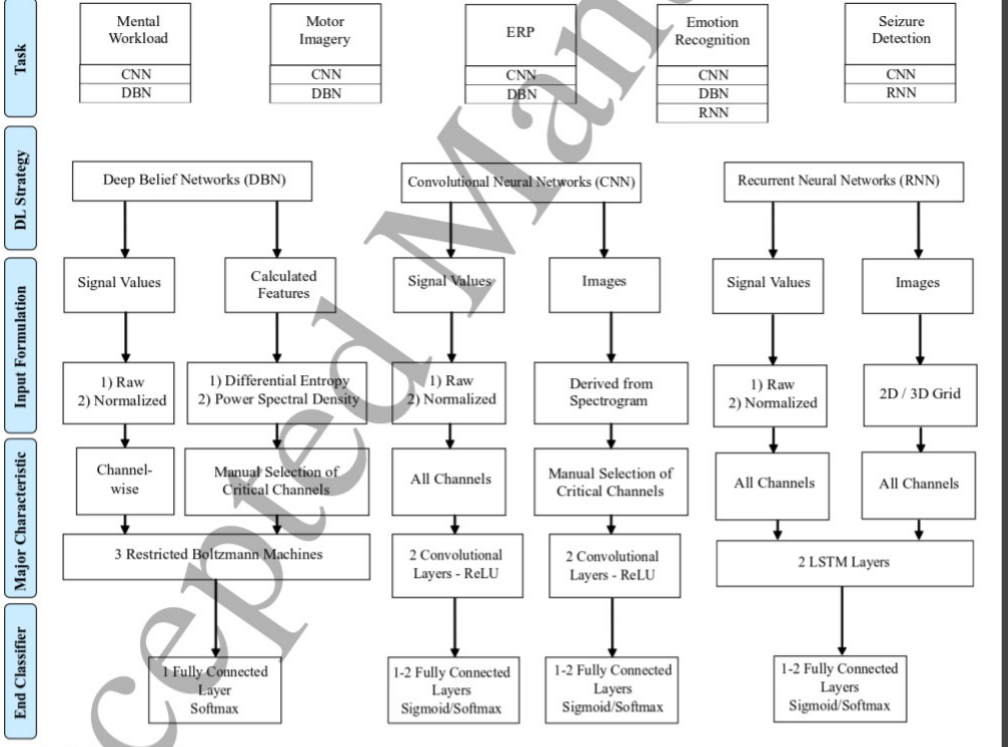

Figure 7: Task-specific deep learning recommendation diagram. The workflow begins with task type (with connected boxes indicating the task's general deep learning architecture recommendation) and leads into deep learning architecture characteristic recommendations, which can serve as the starting point for designing deep learning architectures in future research.

CNN和DBN比较常见，全连接层也有用到。

神经信号数据集

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参考综述

Deep learning for Electroencephalogram (EEG) classification tasks: A review