BCI Memory Retrieval and Encoding at the Cellular Level

Introduction

The cell fate of brain cells introduces complexity in the design of brain computer interfaces. However, control of cell fate might not be necessary to construct a minimal passive memory write system.

Simplified Approach for Minimal Memory Writing System

If the <x, y, z> coordinates (with respect to the brainstem) for all brain cells can be traced, brain cell states and synaptic firing can be modularly controlled, and other memory processes in the nervous system [2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19] can be controlled then perhaps a passive memory writing process in the brain could be possible to develop systematically. All cells in the nervous system can be represented as nodes in a graph [1] or a vector space.

Improvements

Foundational understanding of the brain [20, 21] is likely to allow for more robust approaches. An approach that makes use of more natural components and technical iteration could lead to architectural improvements.

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