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 brain stem) for all brain cells can be traced, brain cell states and synaptic firing can be modularly controlled, and other processes in the nervous system are controlled then a passive memory writing system within the brain should be possible to develop. All cells in the nervous system can be represented as nodes in a graph or a vector space.

Improvements

Foundational understanding of the brain and the mind are likely to allow for more robust approaches. Better control of cell fate, more natural components, and technical iteration could lead to architectural improvements.

References:

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