Polychrony detection in raster plots

This manuscript (permalink) was automatically generated from SpikeAI/polychronies@169d66e on December 3, 2021.

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Abstract

introduction

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Rapid Formation of Robust Auditory Memories: Insights from Noise [3]

Gan were introduced in [4] see also [5] [6] [7] [8] [9]

Stae-of-the-art

surrogate gradients

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spike distance

[10] : Temporally ordered multi-neuron patterns likely encode information in the brain. We introduce an unsupervised method, SPOTDisClust (Spike Pattern Optimal Transport Dissimilarity Clustering), for their detection from high-dimensional neural ensembles. SPOTDisClust measures similarity between two ensemble spike patterns by determining the minimum transport cost of transforming their corresponding normalized cross-correlation matrices into each other (SPOTDis).

On Stability of Distance Measures for Event Sequences Induced by Level-Crossing Sampling [11]

Results

```
### test notebook
```

```
import numpy as np
print(f'{np.pi=}')
```

```
np.pi=3.141592653589793
```

```
```

results on natural images

in [12], we generate raster plots from natural images

A natural documentary, Planet Earth with David Attenborough

```
filename = './nat_inputs/PlanetEarth.mp4'  # filename of the movie
```

References

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DOI: 10.1371/journal.pcbi.1006283 · PMID: 29979681 · PMCID: PMC6051652

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