Contribution ID: 51 Type: not specified

A spike sorting meta package and website for algorithm comparison

Friday, October 26, 2018 11:30 AM (15 minutes)

Spike sorting is an crucial component of most neurophysiology pipelines that precedes downstream analysis of neural firing data. With a dozen or so spike sorting software packages in the mix, there is little to no consensus on which algorithm is most suitable, depending on the experimental setup. This is due to a number of factors including lack of realistic ground truth recordings, no clear consensus on file formats, software installation challenges, and little consensus on evaluation metrics. While we are developing and maintaining two algorithms in house (MountainSort and IronClust), we are also working on a meta package that includes all automated spike sorting algorithms wrapped in single python package with common tools for visualization and file I/O. We plan to host a website providing a rich, interactive comparison of these algorithms applied to standard ground truth datasets (both synthetic and real).

Presenter: MAGLAND, Jeremy

Session Classification: Lightning Talks