Machine learning for Neuro-Imaging

Reshaping brain into a medium-shaped brain

- Voxel Brain Morphometry

Machine-Learning on brain, classifiyng, ...

Resources

Sites

- Human Brain Project (EU)
- Nilearn
- Scikit learn

Papers

1. Main

- Technical article Machine learning for neuroimaging with scikit-learn
- Use case Machine learning framework for early MRI-based Alzheimer's conversion prediction in MCI subjects
- **SUPER IMPORTANT** (limitation) Why voxel-based morphometric analysis should be used with great caution when characterizing group differences
- About algorithms Genetic Algorithms for Finite Mixture Model Based Voxel Classification in Neuroimaging
- Idem Current Methods in Medical Image Segmentation

2. Derivatives

- Can cognitive processes be inferred from neuroimaging data?
- Elucidating a Magnetic Resonance Imaging-Based Neuroanatomic Biomarker for Psychosis: Classification Analysis Using Probabilistic Brain Atlas and Machine Learning Algorithms
- Not realy Datascience but important to understand how it works Voxel-Based Morphometry—The Methods