Week of 9/11 Deliverables

EEG

Deliverables: Getting Usable Data (Ryan)

- Data Usage Agreement
- Get EEG data from HBNB -> PANDA format

- Deliverable 1.
 - DoD: Scope of Work
- Deliverable 2. 🗸
 - DoD: HBNB download md, channel locations, other teammates using data

Scope of Work. ✓

DoD:

 $\underline{https://docs.google.com/document/d/1ExQHqrw4xBn5CVIB8KFHbe}$

g_3vfJZ7Hlro4jm9c7Pww/edit?usp=sharing

HBNB download md. 🗸

DoD:

https://github.com/NeuroDataDesign/eeg-panda-s17f18/blob/master/docs/group/resources/downloading_data.md

Subject Ids, Channel Locations. 🗸

DoD:

https://github.com/NeuroDataDesign/eeg-panda-s17f18/blob/master/data/allowed/subject_ids.csv

https://github.com/NeuroDataDesign/eeg-panda-s17f18/blob/master/data/allowed/electrode_positions.csv

Deliverables: Exploring EEG Data Relevant (Nitin)

- "Look at it" for EEG data relevant to Brain-to-Text
- Write email for Dr. Milham regarding questions about the naturalistic stimuli paradigm

- Write email for Dr. Milham regarding questions about the naturalistic stimuli paradigm
 - DoD: Written email in Google Drive
- "Look at it" for EEG data relevant to Brain-to-Text
 - DoD: <u>Jupyter Notebook</u>

Write email for Dr. Milham regarding questions about the naturalistic stimuli paradigm ✓

DoD: Written email in Google Drive



"Look at it" for EEG data relevant to Brain-to-Text 🗸

DoD: Notebook

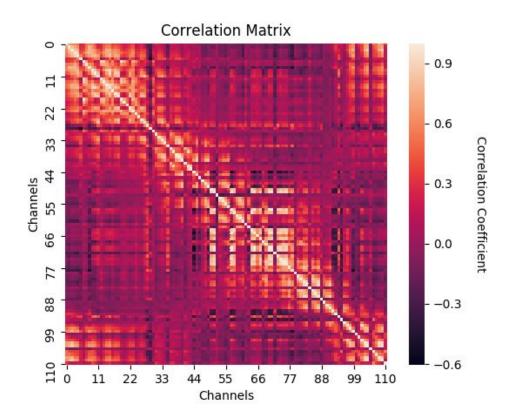
Deliverables: Assessing pre-processing pipeline. (Ronak)

• Use orange-panda pipeline on Healthy Brain Network formatted data to assess functionality and usability, and communicate any adjustments necessary.

- Use on a few subjects, "Look at it".
 - DoD: Plot correlation matrix for a subject's signals from each channel.

Deliverable 1. 🗸

DoD: Only adjustments necessary was script to reformat HBN data into format taken by orange-panda. (No internal changes needed.)



Deliverables: Exploring Phenotypic Data (Vidur)

• "Look at it" for small phenotypic dataset

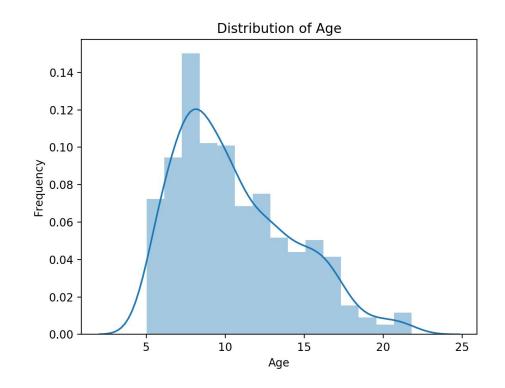
- "Look at it" for small phenotypic dataset.
 - o DoD:

https://docs.google.com/document/d/1vxGHzpz_O6_bFBUTXYRHrjVCbZYvT6ORK8LNlu6dPFk/edit?usp=sharing

Deliverable 1. 🗸

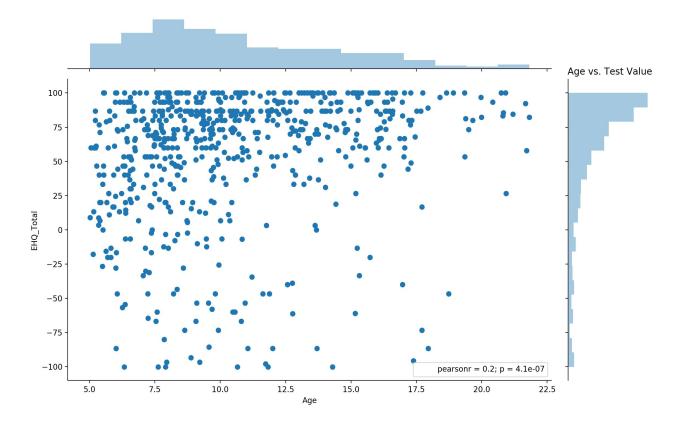
Interesting Figures:

Age distribution of the people. A lot of the people were very young, 7-12 years old. No one younger than 5 or over the age of 22 were used.



Cont. Deliverable 1. 🗸

Joint distribution of age vs test score. We can see that younger people, tend to have scores all over the map, whereas older people have scores mainly positive scores.



Goals for Next Week

- Process a small number of samples from BioBank and Kara ONE using EEG PANDA, report on quality.
- Finalize project decision.
- Draft project proposal
- Read more papers related to finalized project decision.
- Have new members learn necessary software skills as team scopes project (AWS, Docker).
- Extract events from resting state and basic analysis.