BrainEx

22 Screens

MG   KB   VA   YL

Maggie G.   Kyra B.   Vandana A.   yihan l.
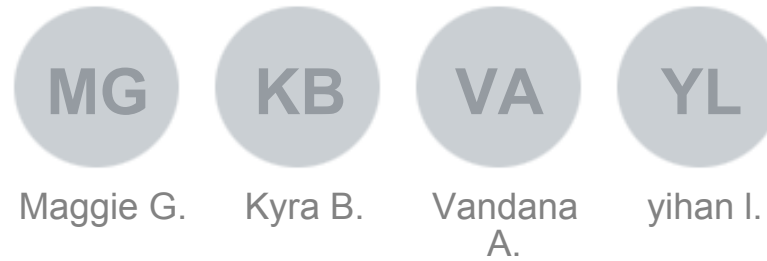
BrainEx

BrainEx | Explore Data | Explore Clusters

Load Dataset | Explore Data | Find Similar Sequences | Need Help?

Explore Raw Data | Explore Clusters

Current Sequence from Clusters

Nothing Selected

Select from upload

Clusters

| Cluster: 1 Length: 100 Sequences: 5 |
| Cluster: 2 Length: 209 Sequences: 60 |
| Cluster: 3 Length: 56 Sequences: 60 |
| Cluster: 4 Length: 67 Sequences: 60 |

Select Clusters by: Most Sequences

Statistics

Number of Data Records
in Cluster: 360
Mean Length: 488
Minimum Length: 80
Maximum Length: 600

Data Visualizer

Legend

- 84135, target correct, Channel 1, 711800, 712457
- 75692, target correct, Channel 2, 264102, 272541
- 14502, target incorrect, Channel 3, 820640, 825503
- 91810, target incorrect, Channel 4, 667590, 675114

Data Viewer

☐	Subject ID	Event Name	Channel Name	Start Time	End Time
■	84135	target correct	Channel 1	711800	712457
■	75692	target correct	Channel 2	264102	272541
■	14502	target incorrect	Channel 3	820640	825503
■	91810	target incorrect	Channel 4	667590	675114
☐	14336	target incorrect	Channel 5	603408	607396
☐	42622	target incorrect	Channel 6	772165	773515
☐	76075	target correct	Channel 7	29971	37295

Back | Return to Clusters | Query with Selected Sequence

BrainEx | Explore Data | Explore Clusters

Load Dataset | Explore Data | Find Similar Sequences | Need Help?

Explore Raw Data | Explore Clusters

Filter ?

Number of Clusters to Display:

[====●====] 15 ▲▼

Display Clusters of Length:

100 ▲▼ [===●===●===] 250 ▲▼

Clusters ?

Cluster: 1 Length: 100 Sequences: 5	
Cluster: 2 Length: 209 Sequences: 60	
Cluster: 3 Length: 56 Sequences: 60	
Cluster: 4 Length: 67 Sequences: 60	

Select Clusters by: Most Sequences ▼

Statistics

Number of Data Records
in Cluster: 360
Mean Length: 488
Minimum Length: 80
Maximum Length: 600

Data Visualizer

Legend

Representative for Cluster 1

Representative for Cluster 2

Representative for Cluster 3

Representative for Cluster 4

Data Viewer

	Cluster ID	Sequence Length	Number of Sequences
☐			
■	1	100	5
■	2	209	60
■	3	56	45
■	4	67	16
☐	5	98	78
☐	6	509	109
☐	7	290	32
☐	8	876	12
☐	9	487	9
☐	10	106	10

◀ Back   View Selected Cluster   Query with Selected Sequence

BrainEx | Explore Data | Explore Raw Data

Load Dataset | Explore Data | Find Similar Sequences | Need Help? | Preprocessing in Progress

Explore Raw Data   Explore Clusters

Current Sequence from Raw Data   ?

Nothing Selected

Select from upload

Filter   ?

Subject ID
Select an option ▼

Channel
Select an option ▼

Event Type
Select an option ▼

Apply Filters

Clear Filters

Statistics

Number of Data
Records: 2000
Mean Length: 488
Minimum Length: 80
Maximum Length: 60

Data Visualizer

Data Viewer

	Subject ID	Event Name	Channel Name	Start Time	End Time
☐	84135	target correct	Channel 1	711800	712457
☐	75692	target correct	Channel 2	264102	272541
☐	14502	target incorrect	Channel 3	820640	825503
☐	91810	target incorrect	Channel 4	667590	675114
☐	14336	target incorrect	Channel 5	603408	607396
☐	42622	target incorrect	Channel 6	772165	773515
☐	76075	target correct	Channel 7	29971	37295

◀ Back

Query with Selected Sequence

BrainEx | Explore Data | Explore Raw Data

Load Dataset   Explore Data   Find Similar Sequences   Need Help?   Preprocessing in Progress ☀

Explore Raw Data   Explore Clusters

Current Sequence from Raw Data   ?

Nothing Selected

💾   Select from upload

Filter   ?

Subject ID
84135 ▼

Channel(s)
Channel 1, Channel 3, Channel ▼

Event Type
incorrect ▼

Apply Filters

Clear Filters

Statistics

Number of Data
Records: 20
Mean Length: 120
Minimum Length: 45
Maximum Length: 150

Data Visualizer

Select one or more whole time series below in Data Viewer to display them in the Data Visualizer

Data Viewer

	Subject ID	Event Name	Channel Name	Start Time	End Time
☐	84135	target incorrect	Channel 1	264102	272541
☐	84135	target incorrect	Channel 1	820640	825503
☐	84135	target incorrect	Channel 1	667590	675114
☐	84135	target incorrect	Channel 3	603408	607396
☐	84135	target incorrect	Channel 3	772165	773515
☐	84135	target incorrect	Channel 4	29971	37295
☐	84135	target incorrect	Channel 4	271711	275177

◀ Back

Query with Selected Sequence

BrainEx

BrainEx | Explore Data | Explore Raw Data

| Load Dataset | Explore Data | Find Similar Sequences | Need Help? | Preprocessing in Progress |

Explore Raw Data Explore Clusters

Current Sequence from Raw Data ?

Nothing Selected

Select from upload

Filter ?

Subject ID
84135 ▼

Channe
Channel 1, Channel 3, Channel ▼

Event Type
incorrect ▼

Apply Filters

Clear Filters

Statistics

Number of Data
Records: 20
Mean Length: 120
Minimum Length: 45
Maximum Length: 150

Data Visualizer

Legend

- ⬛ 84135, target incorrect, Channel 1,
- 🟥 84135, target incorrect, Channel 1,
- 🟧 84135, target incorrect, Channel 1,
- 🟦 84135, target incorrect, Channel 3,

Data Viewer

	Subject ID⬍	Event Name ⬍	Channel Name⬍	Start Time⬍	End Time⬍
⬛	84135	target incorrect	Channel 1	264102	272541
⬛	84135	target incorrect	Channel 1	820640	825503
⬛	84135	target incorrect	Channel 1	667590	675114
⬛	84135	target incorrect	Channel 3	603408	607396
☐	84135	target incorrect	Channel 3	772165	773515
☐	84135	target incorrect	Channel 4	29971	37295
☐	84135	target incorrect	Channel 4	271711	275177
☐	84135	target incorrect	Channel 4	132572	142004

◀ Back

Query with Selected Sequence

BrainEx | Explore Data | Explore Raw Data

Load Dataset   Explore Data   Find Similar Sequences   Need Help?

Explore Raw Data | Explore Clusters

Data Visualizer

Current Sequence from Raw   ?

Legend

84135, target
incorrect,
Channel 1,
84135, target
incorrect,
Channel 1,
84135, target
incorrect,
84135, target
incorrect,
Channel 3,

Select from se...

Filter

Subject ID
84135   ▼

Channel
Channel 1, Channel 3, Channel 4   ▼

Event Type
incorrect   ▼

Apply Filters

Clear Filters

Statistics

Number of Data
Records: 2000
Mean Length: 488
Minimum Length: 80
Maximum Length: 600

Save Subsequence selection   ✕

← → ⌄ ↑   📁 > This PC > Documents > subsequence_folder   ⌄   ↻   Search subsequence_folder   🔍

Organize ▾   New folder   ⊞ ▾   ?

Name	Date modified	Type	Size

This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
Windows (C:)

No items match your search.

⟨   ⟩

File name: sample_subsequence   ⌄

Save as type: CSV (Comma delimited)   ⌄

Authors: Maggie G.   Tags: Add a tag

⌃ Hide Folders   Tools ▾   Save   Cancel

End Time ▼

712457

272541

825503

675114

	14336	target incorrect	Channel 5	603408	607396
	42622	target incorrect	Channel 6	772165	773515
	76075	target correct	Channel 7	29971	37295
	13644	target correct	Channel 8	271711	275177

Back   Query with Selected Sequence

BrainEx | Find Similar Sequences

Load Dataset | Explore Data | Find Similar Sequences

Query Parameters

Current Sequence from Upload ?

Select from upload

Number of best sequence matches: 10

Length of interest of sequence matches:

0 — max

Exclude subsequence matches from current sequence: ☐

Overlap of subsequence allowed: 40 %

Clear Query | Start Query ▶

Statistics

Statistics will display when a query has been made

Data Visualizer

Sequence matches will display when a query has been made

Data Viewer

Sequence match data will display when a query has been made

◀ Back

Save Results

BrainEx | Find Similar Sequences

Load Dataset | Explore Data | **Find Similar Sequences**

Query Parameters

Current Sequence from Upload   ?

Select from upload

Number of best sequence matches: 10

Length of interest of sequence matches:

0 ——●————————●—— max

Exclude subsequence matches from current sequence: ☐

Overlap of subsequence allowed: 40 %

Clear Query   Start Query ▶

Statistics

Statistics will display when a query has been made

Data Visualizer

Sequence matches will display when a query has been made

Data Viewer

Sequence match data will display when a query has been made
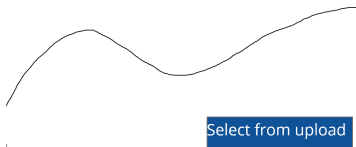
◀ Back

Save Resullts

BrainEx | Find Similar Sequences

Load Dataset | Explore Data | **Find Similar Sequences**

Query Parameters

Current Sequence from Upload ❓

Select

Number of best sequence matches:

Length of interest of sequence matches:
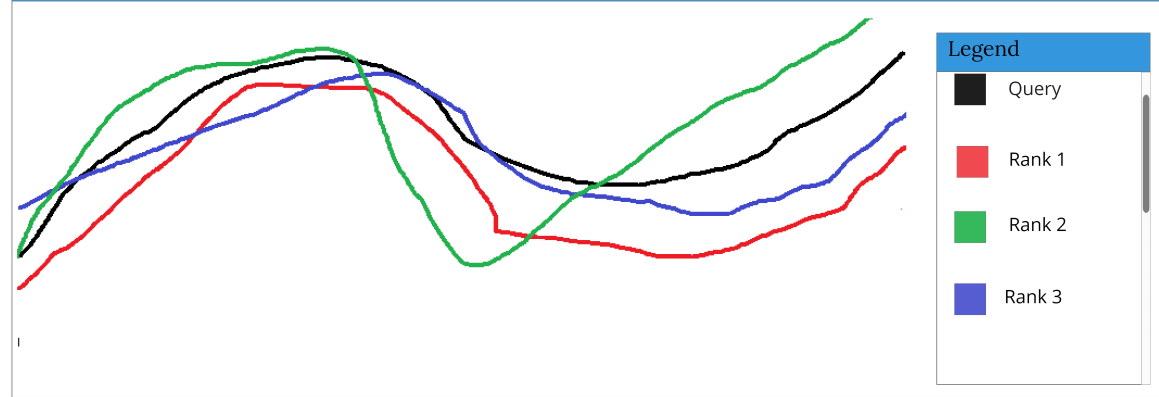
0

Exclude subsequence match from current sequence:

Overlap of subsequence allowed:

4

Clear Query | Start Qu...

Data Visualizer

This PC > Documents > subsequence_folder

Organize ▾ | New folder

Search subsequence_folder

	Name	Status	Date modified	Type	Size
☐ OneDrive					
🖥 This PC	☑ 📄 sample_subsequence	⟳	12/8/2019 5:02 PM	Text Document	0 KB
📁 3D Objects					
🖥 Desktop					
📄 Documents					
⬇ Downloads					
🎵 Music					
🖼 Pictures					
📁 PLA Drive					
🎬 Videos					
💻 Windows (C:)					
🖧 Network					

File name: sample_subsequence | All Files

Tools ▾ | Open ▾ | Cancel

Statistics

Statistics will display when a query has been made

Back

Save Reslults

BrainEx

BrainEx | Find Similar Sequences

Load Dataset	Explore Data	Find Similar Sequences

Query Parameters

Current Sequence from Upload ?

Select from upload

Number of best sequence matches: 10 ▲▼

Length of interest of sequence matches:

0 ▲▼ max ▲▼

Exclude subsequence matches from current sequence: ☐

Overlap of subsequence allowed: 40 ▲▼ %

Clear Query	Start Query ▶

Statistics

Number of returned best matches: 10
Mean Similarity: 75%
Standard Deviation of Similarity: .8
Mean Overlap: 25%
Mean Length: 399

Data Visualizer

Legend

- ⬛ Query
- 🟥 Rank 1
- 🟩 Rank 2
- 🟦 Rank 3

Data Viewer

	Rank ◆	Subject ID ◆	Event Name ◆	Channel Name ◆	Start Time ◆	End Time ◆	Similarity ◆	Overlap ◆
	Query	SubjectID4	target correct	Channel 1	711800	712457	------------	-----------
☐	1	75692	target correct	Channel 2	264102	272541	98%	28%
☐	2	14502	target incorrect	Channel 3	820640	825503	95%	28%
☐	3	91810	target incorrect	Channel 4	667590	675114	85%	39%
☐	4	14336	target incorrect	Channel 5	603408	607396	75%	13%
☐	5	42622	target incorrect	Channel 6	772165	773515	74%	37%
☐	6	76075	target correct	Channel 7	29971	37295	71%	34%
☐	7	13644	target correct	Channel 8	271711	275177	70%	45%
☐	8	91697	target correct	Channel 9	132572	142004	65%	35%
☐	9	40210	target incorrect	Channel 10	439123	447593	64%	20%
☐	10	26592	target correct	Channel 11	677039	680867	60%	31%

◀ Back

Save Resullts

BrainEx
Version 1.0.0

Preprocessing Progress

Need Help?

Preprocessing in Progress...

Working dataset: Dataset6.csv

Cancel Preprocessing

Explore Raw Data while Preprocessing

BrainEx
Version 1.0.0

Preprocessing Progress

Need Help?

Preprocessing stage is complete!
Sequences Preprocessed: 20065/20065

Restart with Another Dataset

Explore Loaded Data

Find Similar Sequences

BrainEx
Version 1.0.0

Preprocessing

Working dataset: Dataset6.csv

Number of
Dataset Headers: 5 ?

Distance Type: Warped Euclidean ▼ ?

Similarity ●——————— 5 % ?

Time-series Length
of Interest: 0 ●———————● max ?

Back   Start Preprocessing

BrainEx
Version 1.0.0

Select a Dataset

Need Help?

Previewed: Dataset6.csv

Raw Datasets

Search......

Subject ID	Event Name	Channel Name	Start Time	End Tim
84135	target correct	Channel 1	711800	712457
75692	target correct	Channel 2	264102	272541
14502	target incorrect	Channel 3	820640	825503
91810	target incorrect	Channel 4	667590	675114
14336	target incorrect	Channel 5	603408	607396
42622	target incorrect	Channel 6	772165	773515
76075	target correct	Channel 7	29971	37295
13644	target correct	Channel 8	271711	275171
91697	target correct	Channel 9	132572	142004
40210	target incorrect	Channel 10	439123	447593
26592	target correct	Channel 11	677039	680861
69749	target correct	Channel 12	907193	908820
97111	target correct	Channel 13	255974	257632
67018	target correct	Channel 14	779233	787420
46316	target correct	Channel 15	739916	740501
44815	target incorrect	Channel 16	379322	379569

Dataset6

Dataset9

Dataset1

Dataset2

Load another dataset

Choose File | No File Chosen... | Add

Back

Continue

BrainEx
Version 1.0.0

Select a Dataset

Raw Datasets

Search......

Dataset6

Dataset9

Dataset1

Dataset2

Load another dataset

Choose File   No File Chosen...   Add

Select a raw dataset

Back

BrainEx
Version 1.0.0

Homepage

Need Help?

Preprocessed datasets

Search......

SART1

SART2

AXCPT1

AXCPT2

Load another preprocessed dataset

Choose File   No File Chosen...   Add

The tool that finds the top k similar matches in fNIRS time series data.

Start with a preprocessed dataset

or

Preprocess a raw dataset

BrainEx
Version 1.0.0

Preprocessing Progress

Need Help?

Preprocessing in Progress...

Working dataset: Dataset6.csv

Cancel Preprocessing

Explore Raw Data while Preprocessing

BrainEx
Version 1.0.0

Preprocessing Progress

<u>Need Help?</u>

Preprocessing stage is complete!
Sequences Preprocessed: 20065/20065

Restart with Another Dataset

Explore Loaded Data

Find Similar Sequences

BrainEx | Explore Data | Explore Raw Data

Load Dataset | Explore Data | Find Similar Sequences | Need Help?

Explore Raw Data | Explore Clusters

Current Sequence from Raw Data ?

Nothing Selected

💾 Select from upload

Filter ?

Subject ID
Select an option ▼

Channel
Select an option ▼

Event Type
Select an option ▼

Apply Filters

Clear Filters

Statistics

Number of Data
Records: 2000
Mean Length: 488
Minimum Length: 80
Maximum Length: 60

Data Visualizer

Select one or more whole time series below in Data Viewer to display them in the Data Visualizer

Data Viewer

	Subject ID	Event Name	Channel Name	Start Time	End Time
☐	84135	target correct	Channel 1	711800	712457
☐	75692	target correct	Channel 2	264102	272541
☐	14502	target incorrect	Channel 3	820640	825503
☐	91810	target incorrect	Channel 4	667590	675114
☐	14336	target incorrect	Channel 5	603408	607396
☐	42622	target incorrect	Channel 6	772165	773515
☐	76075	target correct	Channel 7	29971	37295

◀ Back

Query with Selected Sequence

BrainEx | Explore Data | Explore Raw Data

Load Dataset | Explore Data | Find Similar Sequences | Need Help?

Explore Raw Data | Explore Clusters

Current Sequence from Raw Data ?

Nothing Selected

Select from upload

Filter ?

Subject ID
84135 ▼

Channel(s)
Channel 1, Channel 3, Channel ▼

Event Type
incorrect ▼

Apply Filters

Clear Filters

Statistics

Number of Data
Records: 20
Mean Length: 120
Minimum Length: 45
Maximum Length: 150

Data Visualizer

Select one or more whole time series below in Data Viewer to display them in the Data Visualizer

Data Viewer

	Subject ID	Event Name	Channel Name	Start Time	End Time
☐	84135	target incorrect	Channel 1	264102	272541
☐	84135	target incorrect	Channel 1	820640	825503
☐	84135	target incorrect	Channel 1	667590	675114
☐	84135	target incorrect	Channel 3	603408	607396
☐	84135	target incorrect	Channel 3	772165	773515
☐	84135	target incorrect	Channel 4	29971	37295
☐	84135	target incorrect	Channel 4	271711	275177

◀ Back

Query with Selected Sequence

BrainEx | Explore Data | Explore Raw Data

Load Dataset | Explore Data | Find Similar Sequences | Need Help?

Explore Raw Data | Explore Clusters

Current Sequence from Raw Data   ?

Nothing Selected

Select from upload

Filter   ?

Subject ID
84135 ▼

Channe
Channel 1, Channel 3, Channel ▼

Event Type
incorrect ▼

Apply Filters

Clear Filters

Statistics

Number of Data
Records: 20
Mean Length: 120
Minimum Length: 45
Maximum Length: 150

Data Visualizer

Legend
■ 84135, target incorrect, Channel 1,
■ 84135, target incorrect, Channel 1,
■ 84135, target incorrect, Channel 1,
■ 84135, target incorrect, Channel 3,

Data Viewer

☐	Subject ID⇕	Event Name ⇕	Channel Name⇕	Start Time⇕	End Time⇕
■	84135	target incorrect	Channel 1	264102	272541
■	84135	target incorrect	Channel 1	820640	825503
■	84135	target incorrect	Channel 1	667590	675114
■	84135	target incorrect	Channel 3	603408	607396
☐	84135	target incorrect	Channel 3	772165	773515
☐	84135	target incorrect	Channel 4	29971	37295
☐	84135	target incorrect	Channel 4	271711	275177

◄ Back

Query with Selected Sequence

BrainEx | Explore Data | Explore Raw Data

Load Dataset   Explore Data   Find Similar Sequences   Need Help?

Explore Raw Data   Explore Clusters

Current Sequence from Raw Data   ?

Select from upload

Filter   ?

Subject ID
84135 ▼

Channel
Channel 1, Channel 3, Channel 4 ▼

Event Type
incorrect ▼

Apply Filters

Clear Filters

Statistics

Number of Data
Records: 2000
Mean Length: 488
Minimum Length: 80
Maximum Length: 600

Data Visualizer

Legend

■ 84135, target incorrect, Channel 1,
■ 84135, target incorrect, Channel 1,
■ 84135, target incorrect, Channel 1,
■ 84135, target incorrect, Channel 3,

Data Viewer

☐	Subject ID ⇕	Event Name ⇕	Channel Name ⇕	Start Time ⇕	End Time ⇕
■	84135	target incorrect	Channel 1	264102	272541
■	84135	target incorrect	Channel 1	820640	825503
■	84135	target incorrect	Channel 1	667590	675114
■	84135	target incorrect	Channel 3	603408	607396
☐	84135	target incorrect	Channel 3	772165	773515
☐	84135	target incorrect	Channel 4	29971	37295
☐	84135	target incorrect	Channel 4	271711	275177
☐	84135	target incorrect	Channel 4	132572	142004

◀ Back

Query with Selected Sequence