CHB-MIT

Overview of Dataset

Data

- **24 cases from 23 pediatric patients** (one patient had a second recording 1.5 years after the first recording [chb01, chb24])
- Each case contains roughly **9-42** continuous .edf recordings and EEG signals were sampled at **256 Hz**
- In most cases each .edf recordings contain exactly **one hour** of digitized EEG signals (**921.600 samples)**
- Most recordings contain **23 signals** resulting in a matrix of typically 23 x 921.600 samples
- The **montage** of the EEG recordings is **bipolar** and the dataset uses the **10-20-system** for electrode annotations

Seizures

- **198 clinical seizures** annotated by experts
- Annotations include **seizure start and end time**
- Seizure duration varies from roughly **5-120 seconds** (chb11_99: 752 s)
- Some .edf recordings **contain more than one seizure**

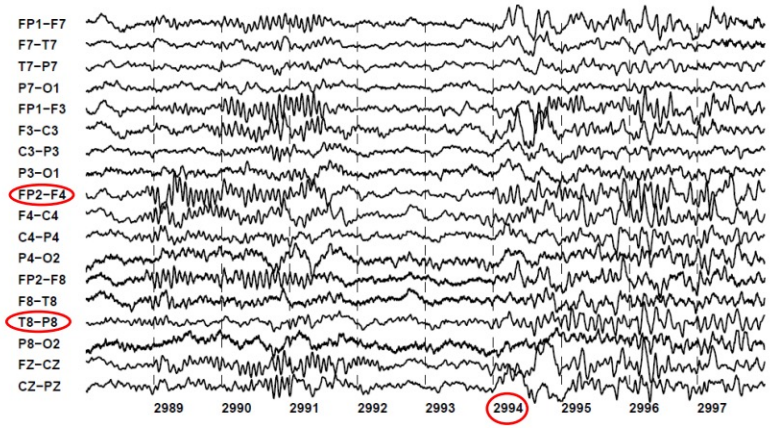

Figure 2. A seizure within the scalp EEG of Patient A (Shoeb, 2009).

	case	seizure_file	number_of_channels	channels	seizure_number	seizure_start	seizure_end	seizure_duration
0	chb01	chb01_03	22.0	[P8-O2, C4-P4, T8-P8, T7-FT9, FP1-F3, FP2-F8, ...	1.0	2996.0	3036.0	40.0
1	chb01	chb01_04	22.0	[P8-O2, C4-P4, T8-P8, T7-FT9, FP1-F3, FP2-F8, ...	1.0	1467.0	1494.0	27.0
2	chb01	chb01_15	22.0	[P8-O2, C4-P4, T8-P8, T7-FT9, FP1-F3, FP2-F8, ...	1.0	1732.0	1772.0	40.0
3	chb01	chb01_16	22.0	[P8-O2, C4-P4, T8-P8, T7-FT9, FP1-F3, FP2-F8, ...	1.0	1015.0	1066.0	51.0
4	chb01	chb01_18	22.0	[P8-O2, C4-P4, T8-P8, T7-FT9, FP1-F3, FP2-F8, ...	1.0	1720.0	1810.0	90.0
...	...	...	...	...	...	...	...	...
193	chb24	chb24_13	22.0	[P8-O2, C4-P4, T8-P8, T7-FT9, FP1-F3, FP2-F8, ...	1.0	3288.0	3304.0	16.0
194	chb24	chb24_14	22.0	[P8-O2, C4-P4, T8-P8, T7-FT9, FP1-F3, FP2-F8, ...	1.0	1939.0	1966.0	27.0
195	chb24	chb24_15	22.0	[P8-O2, C4-P4, T8-P8, T7-FT9, FP1-F3, FP2-F8, ...	1.0	3552.0	3569.0	17.0
196	chb24	chb24_17	22.0	[P8-O2, C4-P4, T8-P8, T7-FT9, FP1-F3, FP2-F8, ...	1.0	3515.0	3581.0	66.0
197	chb24	chb24_21	22.0	[P8-O2, C4-P4, T8-P8, T7-FT9, FP1-F3, FP2-F8, ...	1.0	2804.0	2872.0	68.0

198 rows × 8 columns