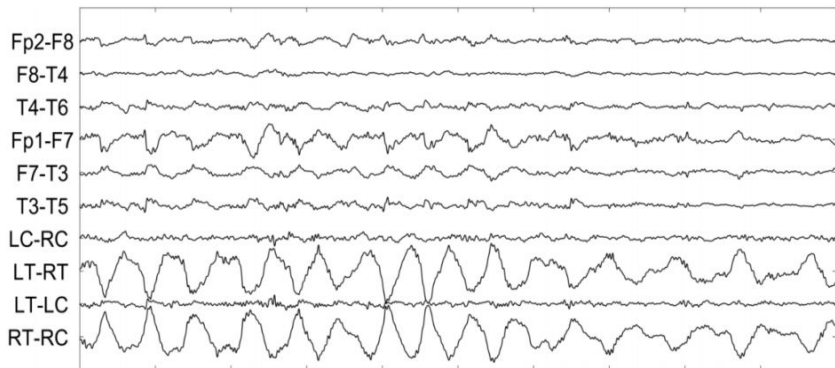# Medical Text Generation

Jialong Yin, Tianqi Wu, Peiyao Li, Kaichen Le, Beichen Zhang

Plan: Automatic report generation from EEG recordings / X-ray Image

Dataset: TUH EEG (16,950 EEG Samples from 10,865 patients)

EEG recording

Impression: Abnormal due to diffuse irregular theta slowing in the awake state; and asymmetric background amplitude (left > right). No epileptiform abnormalities were detected.

Detail: The best awake background showed mild diffuse irregular theta and intermittent irregular delta slowing. The background amplitude was reduced over the right hemisphere (10-20uv on the right vs 20-40uv on the left). During drowsiness there was accentuation of the amplitude asymmetry and increased diffuse slowing. Sleep was not captured. HV and Photic stimulation were not performed.

Corresponding EEG text report

Why automatic generation?

- Labor intensive and error-prone
- Thorough knowledge and extensive experience needed

Metric:

- METEOR (Metric for Evaluation of Translation with Explicit Ordering)
- BLEU (bilingual evaluation understudy)

Software:

- AI medical report generator