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# BioMedEng21

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## Detecting Seizures from a Low-density Montage with BrainsView

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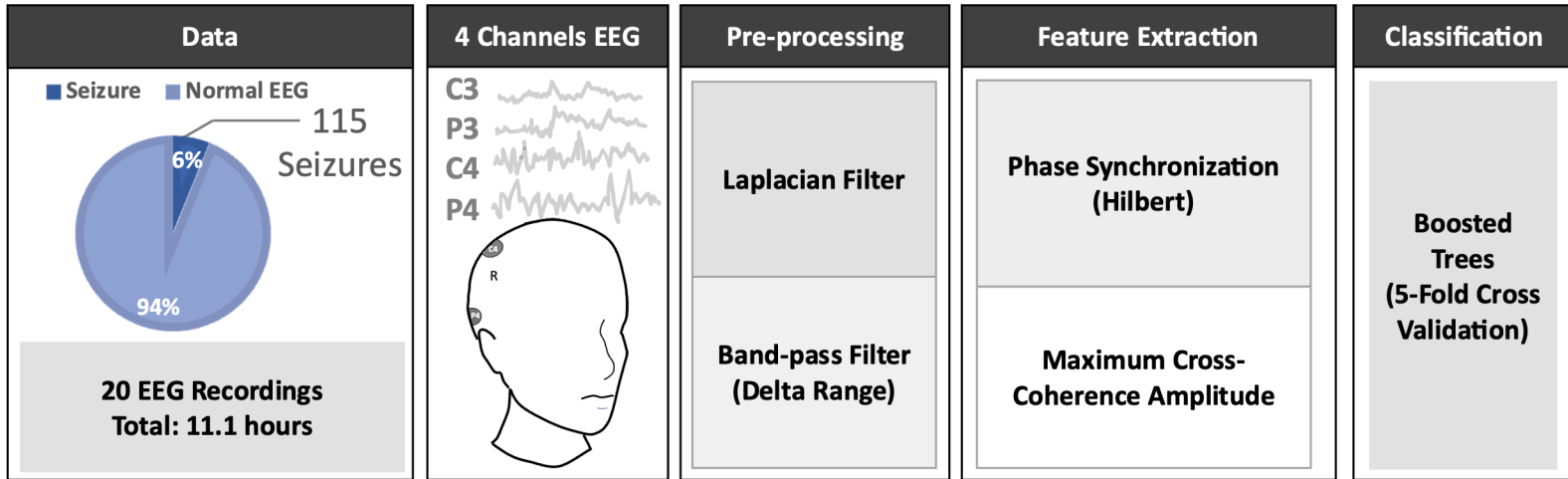


# Introduction

- ◎ Seizures occur frequently in critically-ill children, but can go undetected in 56% of these patients
- ◎ Gold-standard seizure detections using multi-channels Electroencephalogram (EEG) require :
  - Trained clinical physiologists
  - Highly specialised neurologists

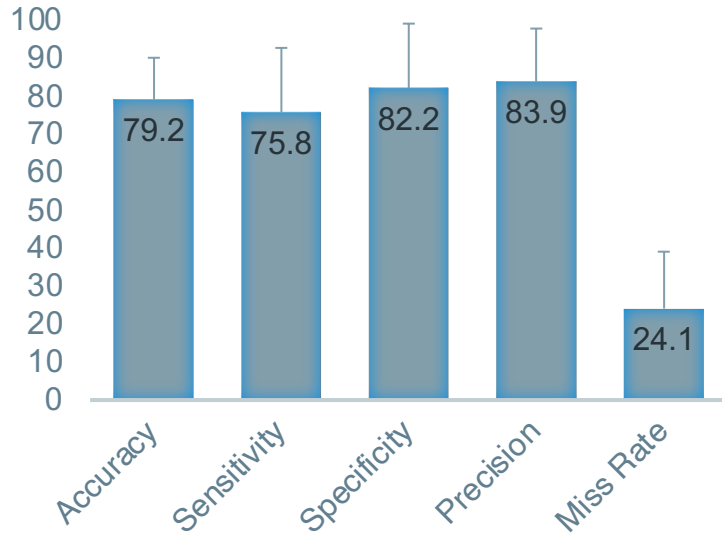
**Aim:** To provide front-line clinicians a user friendly and accurate real-time tool for the identification of seizures

# Methods

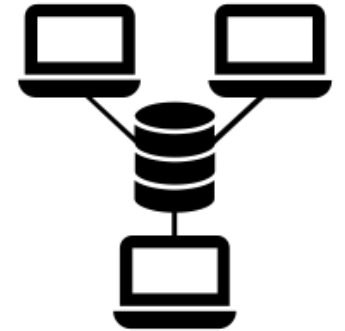


EEG recordings were provided by Royal Hospital for Sick Children, Edinburgh, Scotland.

# Results & Future work



**Average Performance in 20 Subjects**



**Future Work**

# Acknowledgement

- Medical Research Council- Confidence in Concept
- Clinical Neurophysiology Department of Royal Hospital for Sick Children

# References

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3. Guevara Erra R. et al. *PhysRevE*. 2016; 94: e052402