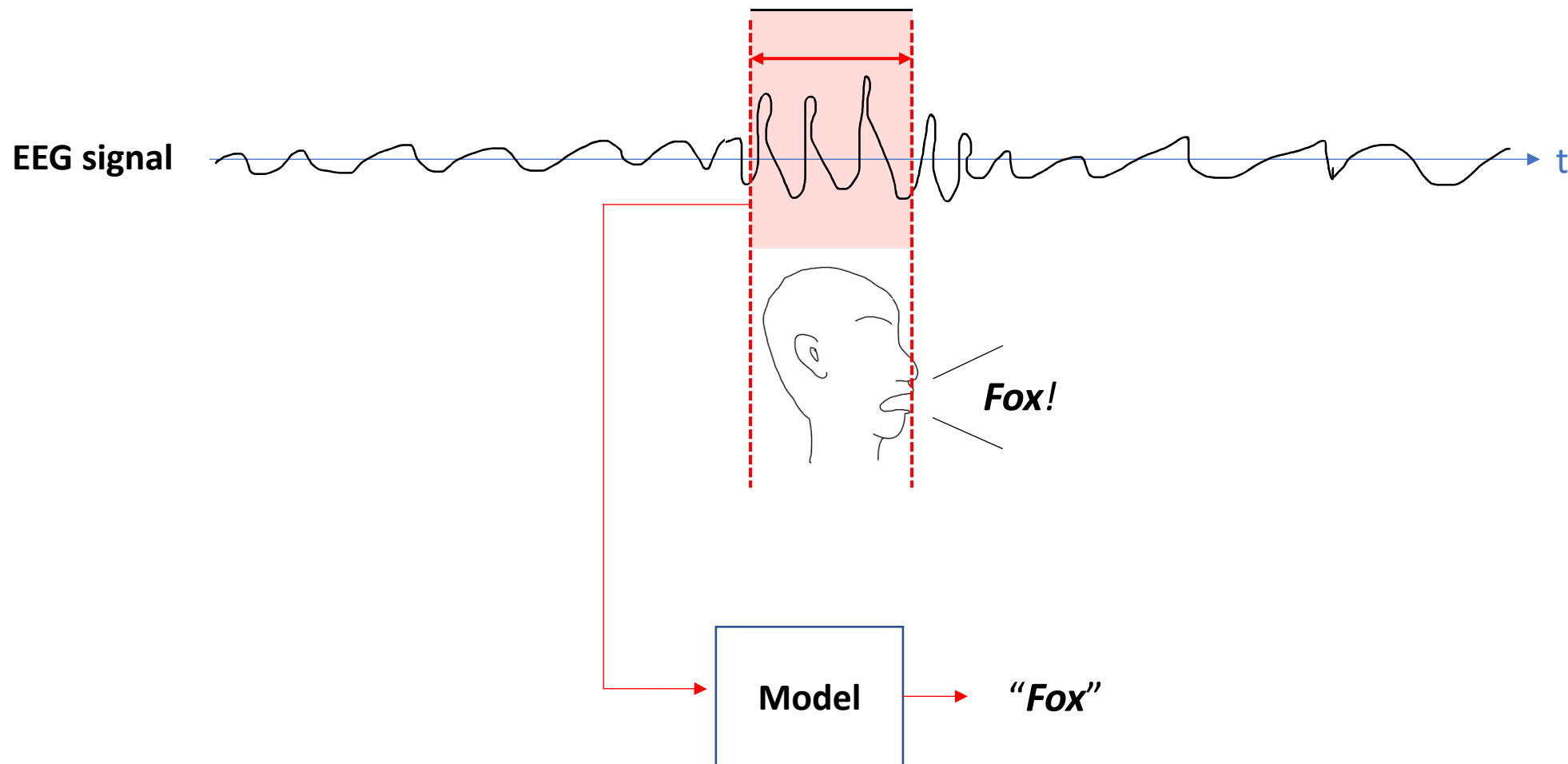


Word's Prediction from Pre-Speech EEG Using a Machine Learning Model

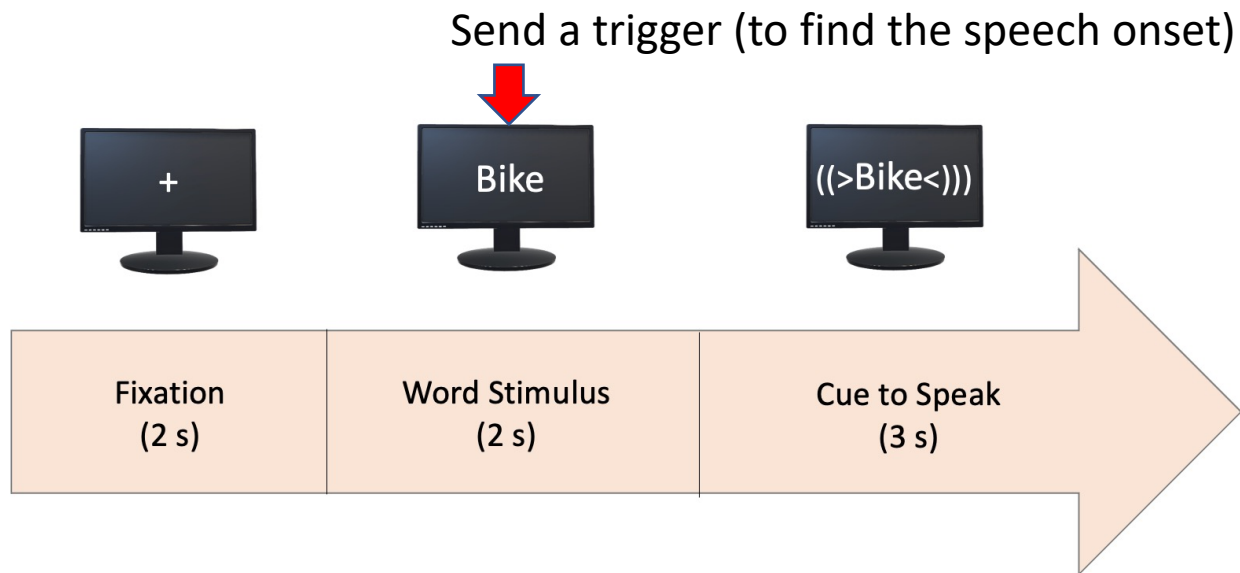
Kanazawa Institute of Technology, Computer Engineering

Shogo Honda

Concept



Method & Progress



Recording

- EEG
- Audio
- Trigger signals



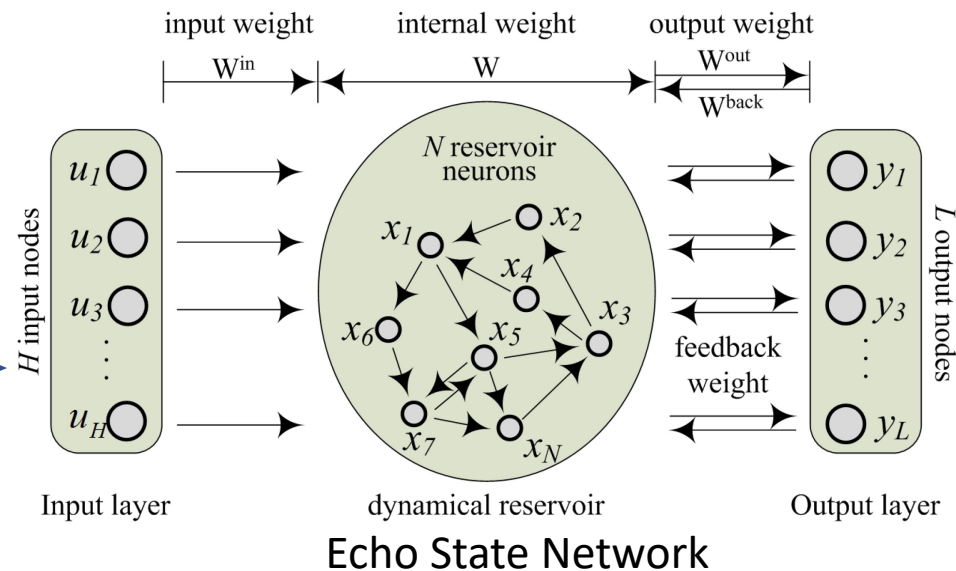
Figure of experiment

Preprocess

Current Classification accuracy: 30%

Improvement:

- Extracting Rich EEG data by filtering
- Modifying the output weight update



Reference

[1] Li G, Li B-J, Yu X-G, Cheng C-T. Echo State Network with Bayesian Regularization for Forecasting Short-Term Power Production of Small Hydropower Plants. *Energies*. 2015; 8(10):12228-12241.
<https://doi.org/10.3390/en81012228>