

Can you see it? Brain-computer interfaces to modulate conscious perception

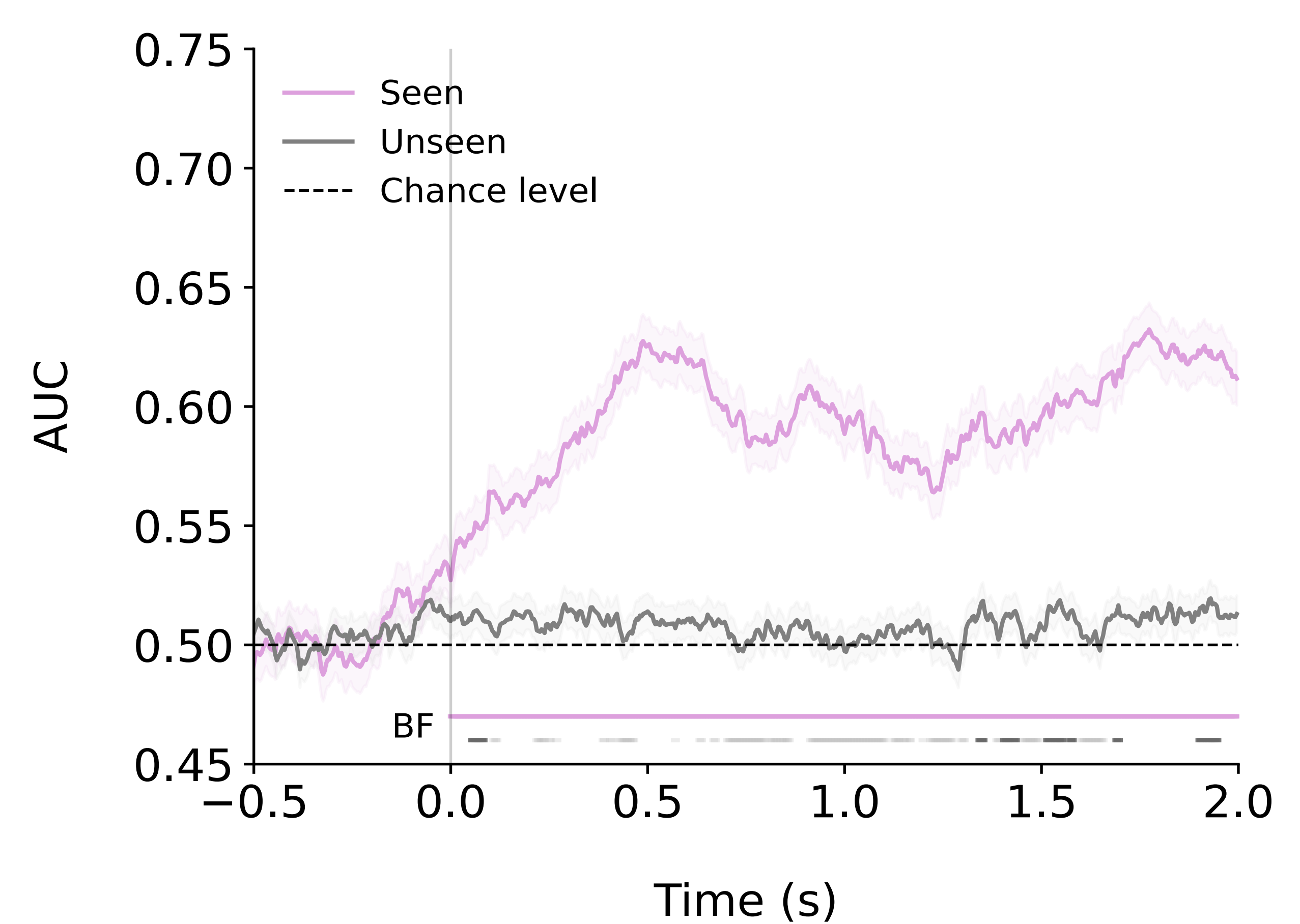
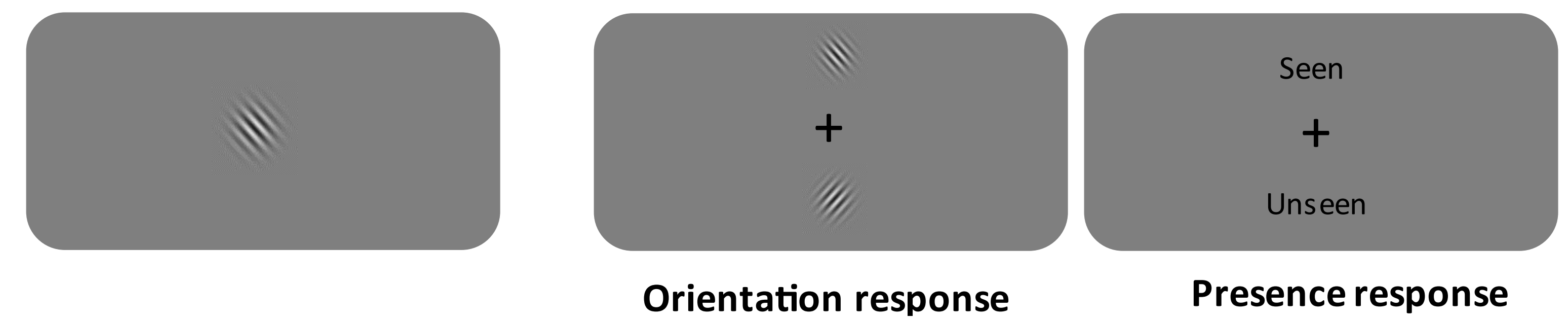
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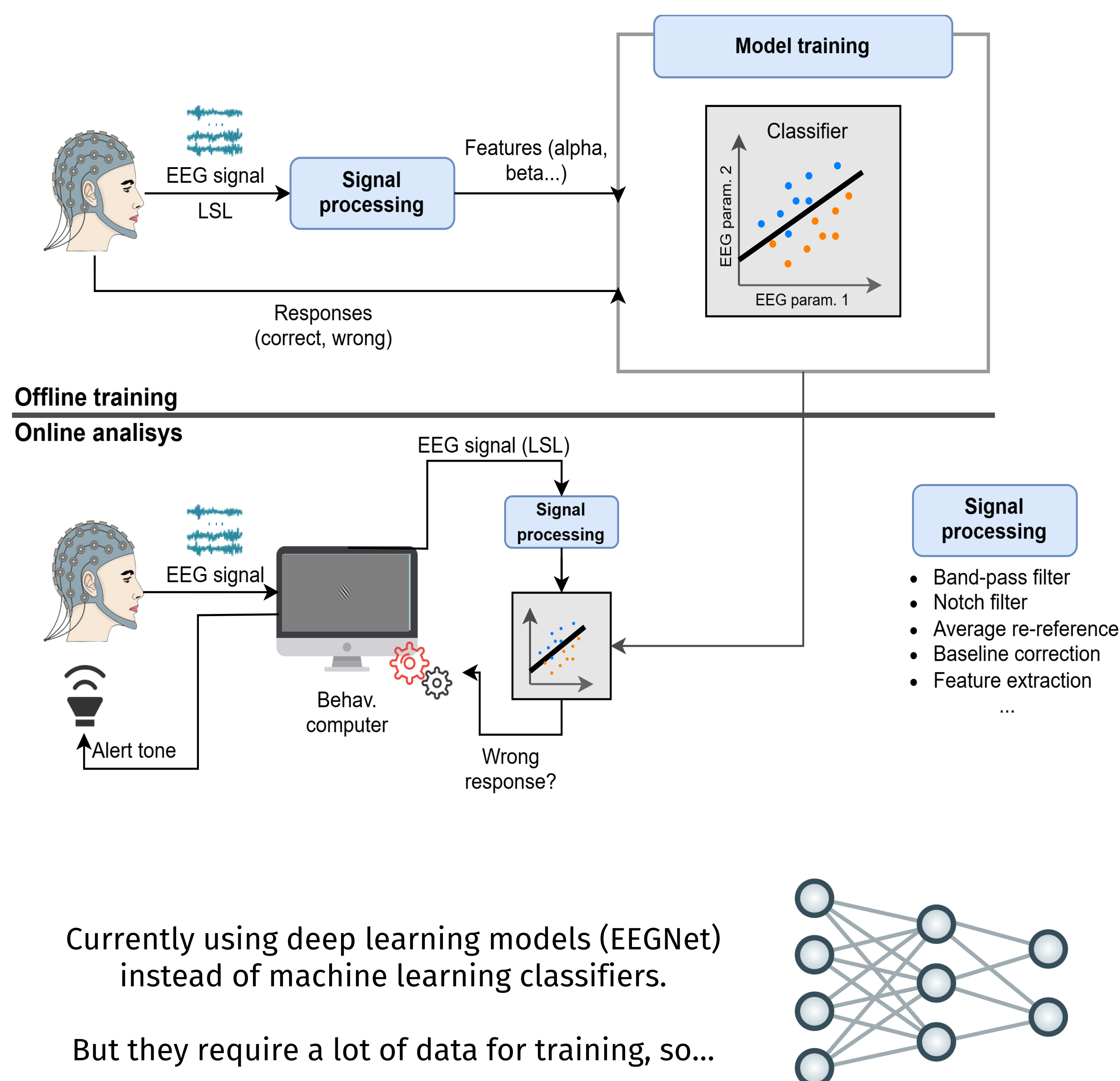
Background

- Presence/absence of a stimulus and subjective perception can be decoded from the EEG signal
- Differences between conscious and unconscious perception (seen vs unseen stimuli)
- BCIs can integrate the observation of neural activity and direct manipulations
- They have been used in clinical applications, but also has a promising role in basic research
- Can we use BCIs to modulate perceptual awareness in healthy volunteers?



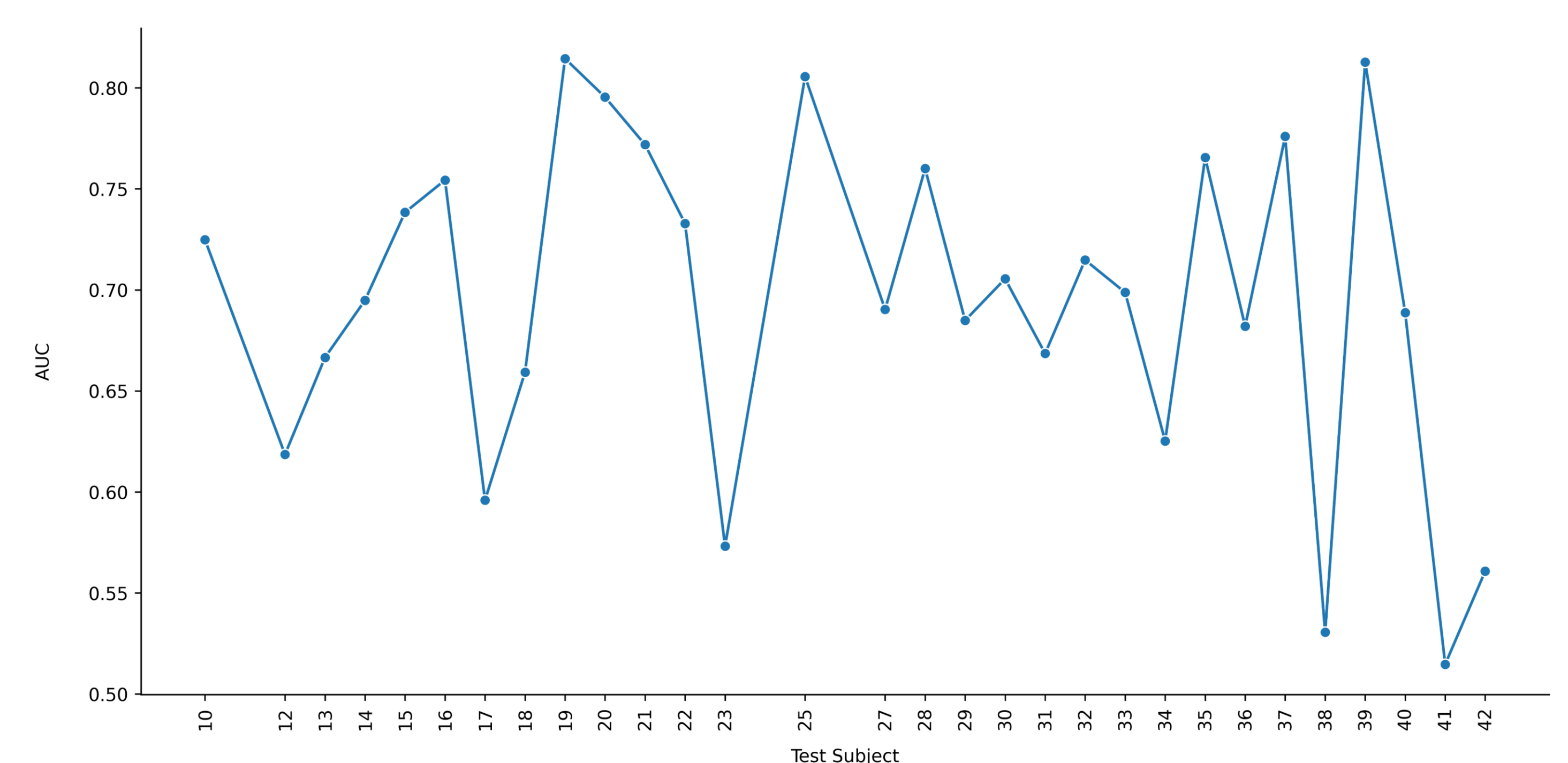
Aims

Build a closed-loop system that can improve conscious perception through neurofeedback.



Two strategies for training

Training with group data → Pre-trained model → Evaluating new subjects



Training with 1st session → Pre-trained model → Evaluating on 2nd session

