

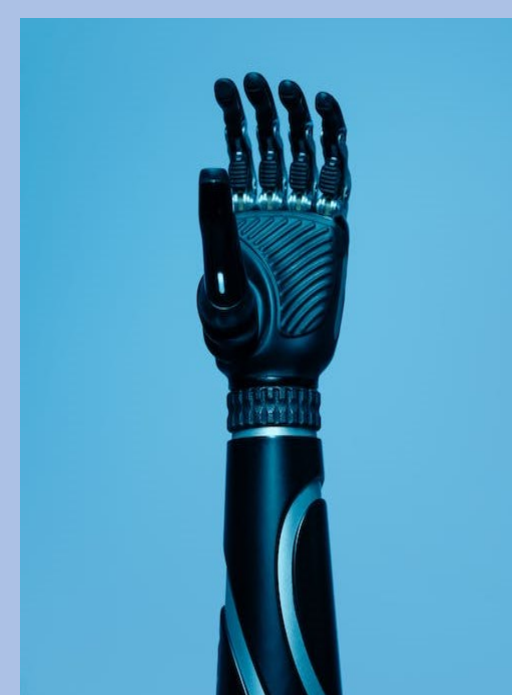
A Framework and Call to Action for the Future Development of EMG-Based Input in HCI

What are the current challenges and limitations hindering the development of EMG-based control systems in HCI?

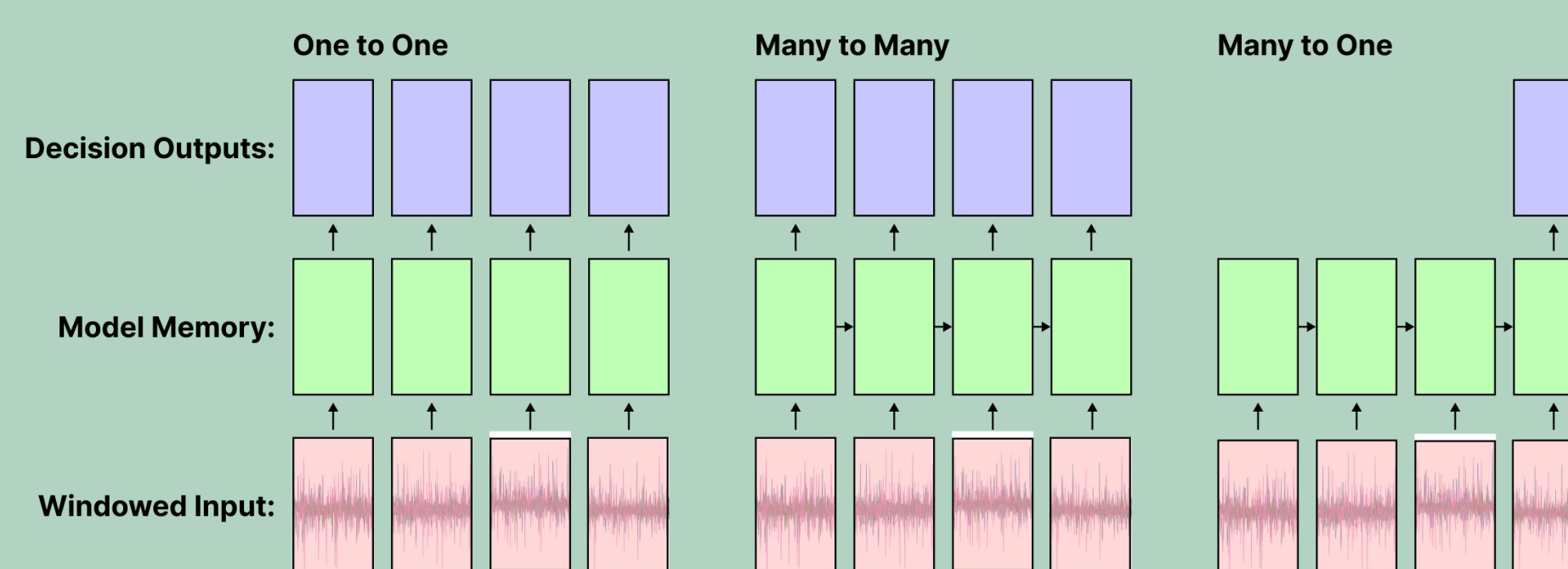
Challenge 1: Interaction Design



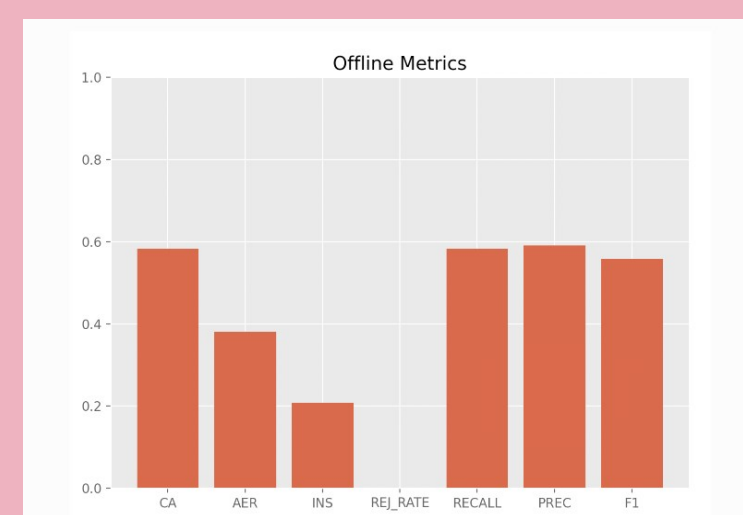
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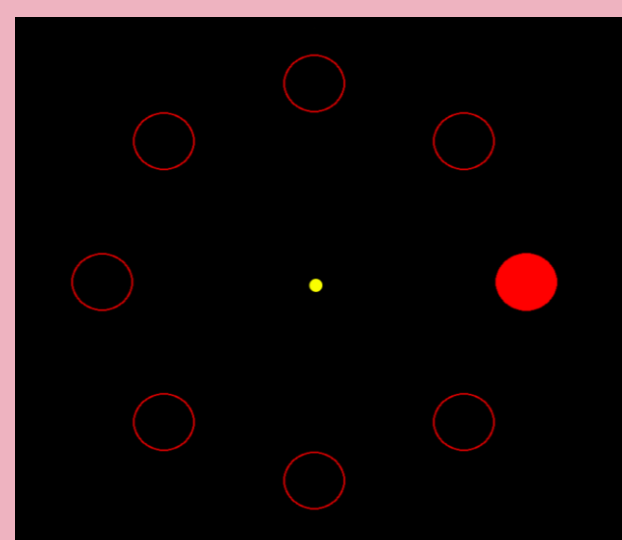
Challenge 2: Model Design



Challenge 3: System Evaluation



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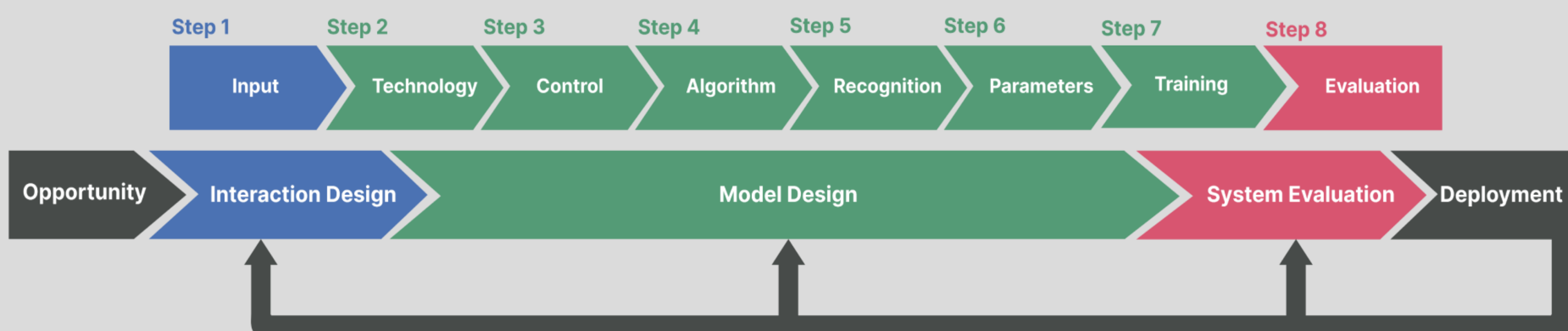
Challenge 4: Reproducibility

Corroboration

Extension

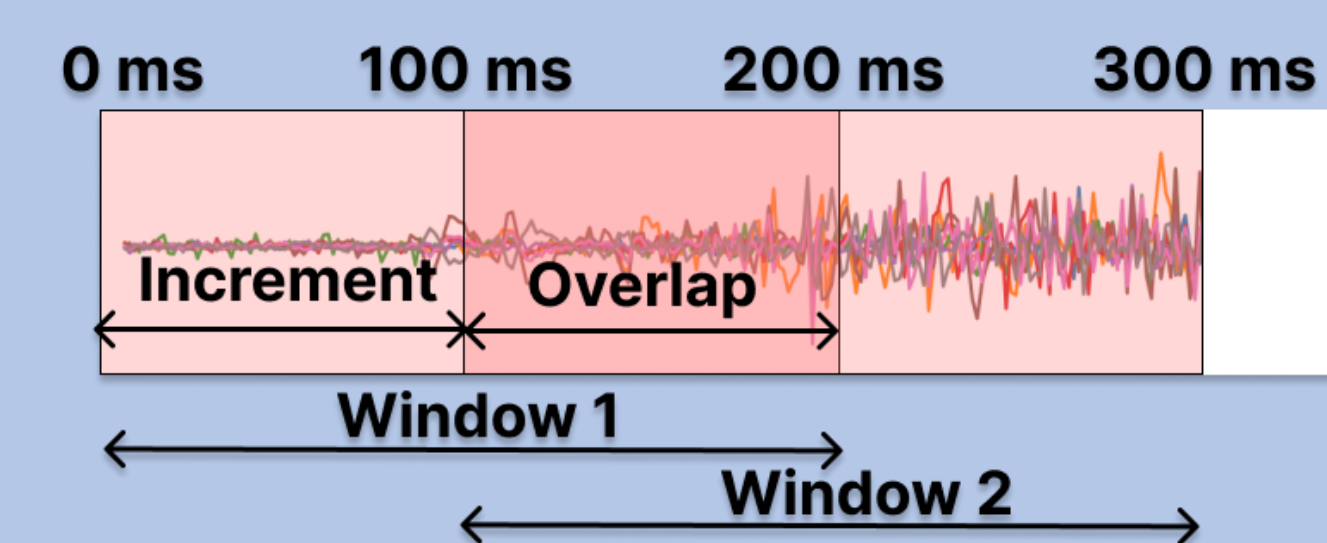
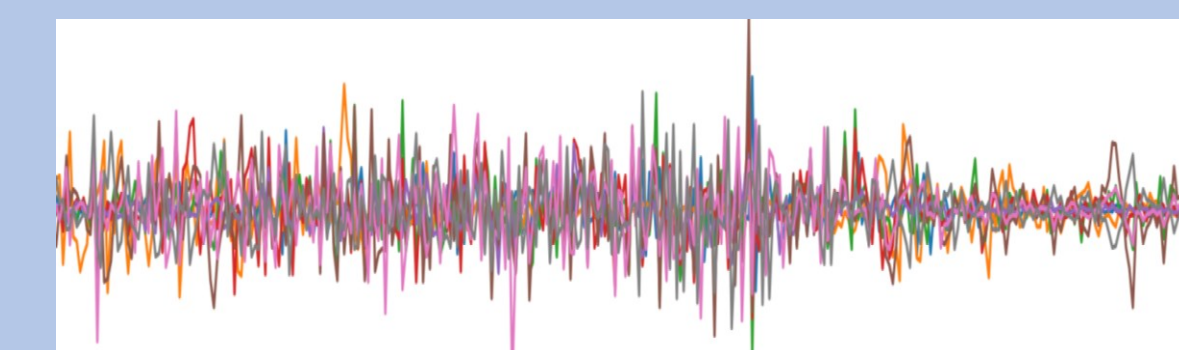
Validation

A Framework for Designing EMG-Based Control Systems:



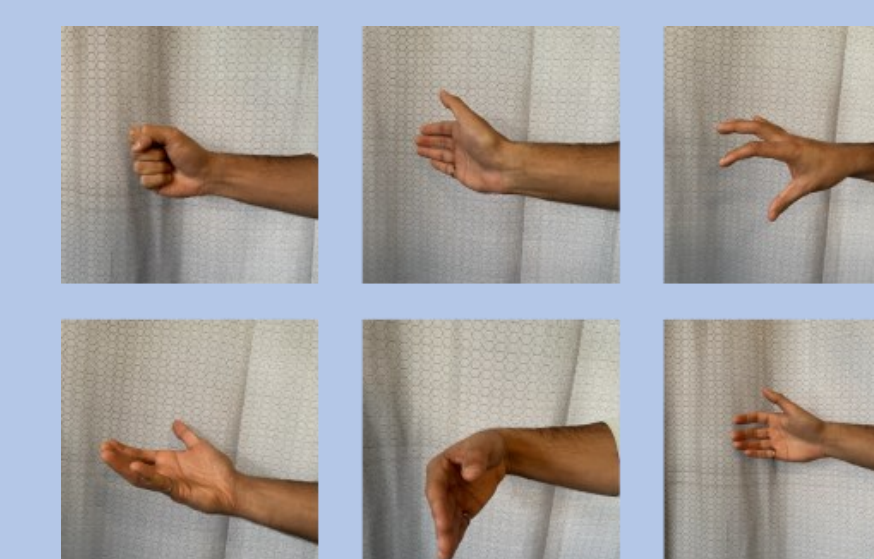
Goal: To unlock the true potential of EMG as a robust handsfree input modality for a wide range of interactive systems.

EMG-Based Control



ML Algorithm

Class Labels



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