Imitation Game: from presential to remote

Adviser:	José Maria Fernandes (jfernan@ua.pt)
Co-adviser:	Ilídio Oliveira (ico@ua.pt)
Collaborator	Susana Brás (susana.bras@ua.pt)
Courses	MECT / MEI / MDJD

Motivation

Several in presence games are based on two players in front of each other were the games go around visual cues to win or lose a game.
Good examples are:
- "macado de imitação" / "espelho" - one player must reproduce the other player posture/face expression
- "sério" - the player who smile first loses

Objective

The objective of this dissertation is to implement this games remotely using a standard tele conference setup - two cameras and a web connection. Naturally integrating, when possible, a (un)biased computer based referee.

Open to "mutations" - some ideas that could be explored:
- integrate heart rate information using sensor or video solutions like PPG
- full web solution? mobile based?
- other?

Research scope
This work will be integrated within the R&D activities of IEETA

Tentative workplan
- familiarization with video based solutions
  - face landmarks, PPG
- identification of requirements and scenarios
- Implementation & demonstration scenario deployment
  - Selection and implementatio of 1 or 2 games
- Evaluation in selected scenarios
- dissertation document preparation.

References

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