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| Ficha de Proposta de Dissertação/ Projeto/Estágio Mestrado | | | | |
| **Ano Letivo 2023/2024, Mestrado em Engenharia Informática, FCEE / Universidade da Madeira** | | | | |
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| Informação sobre o(s) Orientador(es) | | | | |
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| Comparing selection mechanisms for techniques in head-mounted displays | | | | |
| Título do Projeto | | | | |
|  | | |  | () |
| Nome do Professor Orientador | | |  | Contacto Telefónico |
| Filipe Magno de Gouveia Quintal | | |  | filipe.quintal@staff.uma.pt |
| URL do Projeto | | |  | E-Mail |

Preencher no caso de existir um Co-Orientador ou Orientador Externo:

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| --- | --- | --- |
| Augusto Esteves |  | () |
| Nome |  | Contacto Telefónico |
| Instituto Superior Técnico, Universidade de Lisboa |  | augusto.esteves@tecnico.ulisboa.pt |
| Departamento ou Empresa |  | E-Mail |

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| Nome |  | Nº de Aluno |

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| Informação sobre a Dissertação/Projeto/Estágio |

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| Área(s) Científica(s)  Motivação   |  | | --- | | In this thesis, it is proposed for the selected student to evaluate interaction for Augmented Reality devices. Typically, interaction with these devices relies on a cursor that can be controlled by the user's gaze or head movement. Consequently, these devices lack a built-in method to trigger actions. To address this, various approaches have been proposed, including dedicated clickers, on-device buttons, mid-air gestures, dwell, speech recognition, and new techniques that match head motions to visually presented targets.  Given the increasing adoption of such devices, it is crucial to evaluate the performance of the aforementioned techniques in various scenarios. Specifically, this thesis will focus on scenarios where the user is in motion. Although such scenarios are not currently commonplace, we believe that as AR headsets become more prevalent across different applications, in-motion interaction will become increasingly important. |   Objetivos   |  | | --- | | Students are expected to perform the following tasks during the thesis:   1. Carried out a literature review of current approaches for AR interaction. 2. Perform a hardware review to select an appropriate AR/VR headset. 3. Implement a set of prototypes to test the interaction approaches investigated in step 1. 4. Design and perform a user study to assess the different interaction approaches. |   Recursos   |  | | --- | |  |   Preencher no caso de o projeto ser desenvolvido numa Entidade Exterior:   |  |  |  | | --- | --- | --- | |  |  | () | | Nome da Entidade |  | Contacto Telefónico | |  |  |  | | Morada |  | E-Mail |   Observações e/ou Pré-Requisitos   |  | | --- | |  | |