SmartGaze presents its findings at two prestigious conferences



From left to right: Mr Matthew Mifsud (Research Associate), Prof. Ing. Tracey Camilleri (Project Coordinator) and Dr Ing. Nathaniel Barbara (Technical lead). Photo taken at Maynooth University, Ireland, where the ECEM 2024 conference was held.

The SmartGaze project, funded by the Malta Council for Science and Technology (MCST) under the Smart Cities programme, has made significant strides in developing a cutting-edge system to assist individuals with mobility impairments. The project team recently presented its findings at two prestigious conferences: the 26th International conference on Human-Computer Interaction (HCII 2024) and the European Conference on Eye Movements (ECEM 2024). At both events, poster presentations were delivered, outlining the innovative approach the team is taking to enable more natural and accessible control of smart devices through eye movements.

The primary goal of SmartGaze is to develop a system that allows users to control smart home devices without the need for a computer interface which typically requires users to select icons to initiate specific commands. Instead, the proposed solution allows users to interact with their environment by simply looking at a device and making intuitive eye movements to activate its control functions. This solution is particularly designed for individuals with limited mobility, allowing them to perform everyday tasks in a more natural and seamless manner, eliminating the complexities of traditional screen-based systems.

Through the ongoing research and testing phases, the SmartGaze project has shown promising results in trials conducted with subjects in the lab. The team is now collaborating

with Agenzija Sapport to have the system tested by individuals with limited mobility whose feedback will be invaluable to refine the system further. This collaboration marks an important step toward ensuring that the technology meets the real-world needs of its users and continues to evolve into a reliable and efficient solution that enhances independence and quality of life.

For updates on the project please visit our Facebook page: https://www.facebook.com/EyeConmIt

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