

Investigating Human-Computer Interaction Techniques using Eye Tracking Technology

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Abstract: *This provides a comprehensive overview of a research paper that explores the use of eye movements as a computer input medium in user-computer dialogues. It highlights the prevalent lopsided communication between users and computers, where computers transmit more information to users than the other way around. Eye movements are proposed as a potential high-bandwidth user input due to their natural and convenient nature. The Paper acknowledges the rapid advancement of technology and its impact on HCI, focusing on eye-tracking technology as a promising method for improving the user experience and enabling more natural interactions. It explores various eye-tracking techniques, their strengths, limitations, and integration into HCI systems. The paper also highlights recent studies that have utilized eye-tracking technology to explore novel interaction techniques and evaluate their effectiveness.*

Furthermore, the research delves into the development of interaction techniques that incorporate eye movements into the user-computer dialogue. It addresses broader issues related to non-command-based interaction styles and discusses human factors and technical considerations associated with using eye movements as an input medium.

Overall, this research aims to enhance the user-computer dialogue by utilizing eye movements as a new input medium. It emphasizes the importance of convenient and natural interaction techniques and contributes valuable insights into the field of HCI by considering human factors and technical considerations involved in using eye movements.

Keywords: HCI

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