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Integrating Eye-Tracking Analysis to Enhance Web Usability Evaluation

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Abstract : It is widely believed that usability evaluation is necessary to evaluate a website design for further improvement. Traditional methods of usability evaluation have given sufficient insights to reveal usability problems of websites. Eye-tracking analysis has been considered as a useful method that adds a powerful dimension to web usability evaluation. It allows web designers and usability researchers to understand exactly what users do and do not see on a web page, thus disclose more information on web usability and provide a more complete insights on a website design. This paper elaborates on moving beyond traditional methods of web usability evaluation by integrating eye-tracking analysis to enhance the evaluation of website design, and presents three case studies to support this approach. In these case studies, eye movement metrics such as gaze plots and fixation-derived metrics, and user performance data such as task completion times and number of errors were recorded as objective measurements that can inform the necessity for website design improvements.

Keywords: design, eye-tracking, usability evaluation, website

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