

Landscape Rippling: Context-based water-mediated interaction design

Weiye Lin^{1,2} | Haoran Hong^{1,3} | Yingying She⁴  | Baorong Yang⁵ 

¹School of Informatics, Xiamen University, Xiamen, China

²School of Software and Microelectronics, Peking University, Beijing, China

³Graduate School of Frontier Sciences, The University of Tokyo, Chiba, Japan

⁴School of Film, Xiamen University, Xiamen, China

⁵College of Computer Engineering, Jimei University, Xiamen, China

Correspondence

Yingying She, School of Film, Xiamen University, Xiamen, China.

Email: yingyingshe@xmu.edu.cn

Baorong Yang, College of Computer Engineering, Jimei University, Xiamen, China.

Email: yangbaorong@jmu.edu.cn

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Abstract

With a core purpose of helping users to understand the context, a water interface provides possibility for enhancing user experience in interaction process. Starting from analyzing existing water-mediated interaction approaches, we proposed a water-mediated interaction design model and a corresponding user experience model, aiming to eliminate the boundary between users and the context with water as the medium. According to the proposed model, we implemented a water-mediated interaction system Landscape Rippling, with the painting “A Panorama of Rivers and Mountains” as its context. Ultimately, user experience tests of the interaction system demonstrate the effectiveness of this water-mediated interaction design model.

KEYWORDS

augmented reality, context-based interaction, interactive interface, water-mediated interaction

1 | INTRODUCTION

Tangible user interfaces (TUI) have been constantly emerging, which serve as user interfaces as well as part of interaction spaces, enriching the form of interaction and creating natural human-computer interaction (HCI). Water is one

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