


Extending touch: towards interaction with large-scale surfaces

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2009 Article



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Published in:




- Proceeding
ITS '09 Proceedings of the ACM International Conference on Interactive Tabletops and Surfaces
Pages 117-124
ACM New York, NY, USA ©2009
[table of contents](#) ISBN: 978-1-60558-733-2 doi>[10.1145/1731903.1731927](#)

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Touch is a very intuitive modality for interacting with objects displayed on arbitrary surfaces. However, when using touch for large-scale surfaces, not every point is reachable. Therefore, an extension is required that keeps the intuitivity provided by touch: pointing. We will present our system that allows both input modalities in one single framework. Our method is based on 3D reconstruction, using standard RGB cameras only, and allows seamless switching between touch and pointing, even while interacting. Our approach scales very well with large surfaces without modifying them. We present a technical evaluation of the system's accuracy, as well as a user study. We found that users preferred our system to a touch-only system, because they had more freedom during interaction and could solve the presented task significantly faster.

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