A User Modelling Wizard for People with Motor Impairments

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Abstract

Since a couple of years tablets are gaining ever increasing markets share, so that desktop PCs are slowly losing their dominant role. People with disabilities are also attracted by tablets but they are sometimes challenged by the multi-touch technology itself and the natural interfaces of the provided applications.

This paper presents an approach, where a novel user modelling wizard for people with motor impairments is used to gain a deeper understanding of very specific interaction patterns leading to a user model, which allows us to automatically derive an application- and user-specific configuration. An evaluation showed promising results because the configuration resulting from the user model is comparable to the configuration proposed by consultants. The result can either be used by the consultants to configure applications accordingly, or by the application itself, to provide an adaptive user interface suited to the individual capabilities.

This paper was published in the proceedings of the International Conference on Advances in Mobile Computing & Multimedia (MoMM’13) and can be downloaded at http://dl.acm.org/citation.cfm?id=2536860.