Video Showcase: Using Expressy to Showcase Expressiveness in Touch-based Interactions

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Abstract

We present a video demonstration of how information about hand movements, generated from a wrist-worn IMU (inertial measurement unit), can be used to provide expressiveness to touch-based interactions. The IMU identifies features that were not previously accessible, such as instantaneous force, wrist roll and pitch. We demonstrate a range of applications that have been extended using Expressy, a system we describe in more detail in the full paper [1]. Tap force allows users to express their intent behind an interaction before touch. Wrist roll and pitch enriches the touch during the interaction. Flick force and wrist roll allows users to follow-up their touch interaction.

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ACM Classification Keywords

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References

1. Wilkinson, G., Kharuffa, A., Hook, J. et al. Expressy: Using a Wrist-worn Inertial Measurement Unit to Add Expressiveness to Touch-based Interactions**.** In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (CHI '16). http://dx.doi.org/10.1145/2858036.2858223