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# Tempera-tour, Hot Apps, Cool Widgets: Thermal Feedback for Mobile Devices

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**Abstract**

Thermal stimulation is a rich, emotive and salient feedback channel that is suitable for mobile HCI. It can act as an alternative non-visual notification channel for mobile situations that are too bumpy or noisy for vibrotactile and audio feedback. It can augment both visual and non-visual feedback to add an extra richness to the interaction experience. In addition, thermal output is entirely private, so it is suitable for quiet environments or when secrecy is important. This demonstration will consist of some example applications which highlight a variety of uses. We show an application titled "Tempera-tour", where environmental temperatures from around the world can be felt. We also show thermal augmentation of visual and audio media as a means of influencing hedonic experience. Finally we show simple thermal widgets, such as a thermal progress bar, ambient notifications and thermal availability information. This demo accompanies the paper "Thermal Icons: Evaluating Structured Thermal Feedback for Mobile Interaction".

**Author Keywords**

Thermal feedback; mobile interaction; non-visual feedback

**ACM Classification Keywords**

H.5.2 User Interfaces: Haptic IO