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# The Secret Life of Computers

## Jonathan Aceituno

Inria Lille  
Poietic  
jonathan.aceituno@inria.fr

## Ludovic Potier

Inria Lille  
Poietic  
potier.ludovic@gmail.com

### Abstract

This video retraces our serendipitous discovery of a particular function of laptops and mobile devices: doing “computer music” by reusing and augmenting existing instrumental gestures. We illustrate the potential of portable devices for expressive musical control as wind and percussive instruments, first individually, then in a collective performance. Most uses of computers in music follow the traditional view that built-in input devices are vectors for graphical interaction, and while several attempts have reminded us that portable devices could be hijacked for direct musical performance, none have led to the degree of expressivity that is demonstrated here. This is the result of a design approach emphasizing musician-instrument interaction as an embodied activity. Besides

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confirming the adequacy of standard personal computing equipment for musical performance, this video shows a successful example of repurposing existing technologies.

### Author Keywords

digital musical instrument; laptop-based physical interfaces; repurposing; musical expression

### ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous

### Technical details

All the music that can be heard in the video has been played using our prototypes developed for OS X and iOS in Objective-C and Pure Data. We used commercial virtual instruments for sound synthesis. We recorded the first part of the video live, while our interpretation of the song *Hotdog* [1] in the second part was recorded track-by-track.

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### References

[1] Greb, B. and Dugnus, E. *Hotdog*. On *Benny Greb - Brass Band* [CD]. Neustadt, Germany: Grundsound (2009).

