EXPRESSIVE INTERACTION

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NSERC CREATE CLUE
Collaborative Learning in Usability Experiences

Many interaction techniques focus on immediate usability with little learning effort. This is a reasonable goal in many cases, but sometimes expending effort to master a more nuanced and complex technique can be beneficial if it increases expressivity. Expressivity refers to the breadth of what can be represented and communicated in an interaction language – the more expressive, the greater the variety and quantity of commands that can be accessed. As a musical analogy, consider the expressivity of a triangle versus a violin. In this talk, I survey my research focusing on expressive interaction. This includes: Conté, a pen-like input device modeled after an artist's crayon that leverages small changes in contact geometry; Pin-and-Cross, a touch overloading technique combining static touches ("pins") with nearby crossing selection; Gunslinger, a mid-air interaction technique using barehand postures and gestures performed in a relaxed arms-down position; and Finger-Aware Shortcuts, a method to trigger different keyboard shortcuts depending which finger, hand, and posture presses a key.

Daniel Vogel is an Assistant Professor in the Cheriton School of Computer Science at the University of Waterloo. His research interests are in Human-Computer Interaction, focusing on fundamental characteristics and novel forms of input and interaction. In addition to earning a PhD and MSc from the University of Toronto, he holds a BFA from the Emily Carr University of Art + Design, and continues to exhibit artwork and apply his combined art and science background to research. He has received multiple honours including: best paper awards at the ACM CHI and IHM conferences; the Bill Buxton Dissertation Award (2010); and a Banting Postdoctoral Fellowship (2011 - 2013).

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12:00pm
Azrieli Pavilion 238
Carleton University

All welcome.
No need to RSVP.

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