

---

# MoCap Tango: Materializing Movement Qualities

## **Ambra Trotto**

Interactive Institute Swedish ICT  
and Umeå School of Architecture,  
Umeå University  
ambra.trotto@tii.se

## **Jeroen Peeters**

Interactive Institute Swedish ICT  
and Department of Informatics,  
Umeå University  
jeroen.peeters@tii.se

## **Stoffel Kuenen**

Umeå Institute of Design,  
Umeå University  
christoffel.kuenen@umu.se

Permission to make digital or hard copies of part of this or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored.

For all other uses, contact the Owner/Author.

Copyright is held by the owners/author(s).

*CHI'16 Extended Abstracts*, May 07-12, 2016, San Jose, CA, USA

ACM 978-1-4503-4082-3/16/05

<http://dx.doi.org/10.1145/2851581.2889439>

## **Abstract**

This video shows the ongoing design research project *MoCap Tango*. The project highlights the subtle qualities embedded in the physical dialogue between two tango dancers from a design perspective. Using custom-made wearables fitted with passive markers, in an optical Motion Capture System, the movements of two world-class tango dancers are captured. This data is used to experiment with real-time visualisations and 3D printed materialisations of the movements. The video presents the current state of the project, showing public performances in which the system was used as well as current work to use the data to create animations and 3D printed sculptures. Interviews with part of the design team highlight motivations for the project and discuss its relevance for embodied interaction design.

## **Author Keywords**

Embodiment; design research; experience; dance; tango; performance; visualisation

## **ACM Classification Keywords**

H.5.m. Information interfaces and presentation