Keynotes & Capstone

Keynote: Stops in Motion – Animation as Meta-cinematographic Concept

Franziska Bruckner, St. Pölten UAS, AT

Abstract

Stop-motion is an animation technique, in which objects are shifted in small increments between individually photographed frames, creating the illusion of movement when the series of photos are projected as a continuous sequence. In filmic contexts stop-motion reaches a specific potential of expression, but already includes historically grown aspects of intermediality by combining artistic spheres like photography, music, fine arts, theater or puppetry. More comprehensive ideas of animation are featured from several theorists, such as Lev Manovich (1995), Alan Cholodenko (1991) or Suzanne Buchan (2013), which also emphasize the variety of manual, mechanical and conceptual possibilities of stop-motion beyond the medium film.

The talk "Stops in Motion" focuses on an expanded notion of stop-motion, its potential before, in, and beyond its filmic boundaries and aims to explore a brief history of this aesthetically diverse animation technique. Beginning with precinematic devices, the lecture outlines important steps of stop-motion in film history and explores innovative prospects since its digitalization. This not only includes possibilities of established stop-motion software, but also focuses on opportunities in virtual and augmented reality applications. As stop-motion vitalizes objects in a visible fragmented way, it is an ideal concept for investigating new understandings of cinematic perception. Viewed from this perspective, stop-motion functions not anymore as a technique but as a "meta-cinematographic" concept and becomes a tool to fragment and recompose the world.

Biographie

Dr. Franziska Bruckner (Salzburg, 1981) is head of the research group Media Creation at St. Pölten University of Applied Sciences, co-coordinator of the Focus Group Animation within the German-speaking Society of Media Studies and board member of ASIFA-Austria.

She graduated in Theater-, Film- and Media Studies at the University of Vienna as well as Painting and Animation at the University of Applied Arts Vienna. From 2009 to 2013 she was a university assistant at the department of Theater-, Film- and Media Studies in Vienna, from 2013 to 2017 she worked as lecturer for animation theory and practice at the University of Vienna, University of Tübingen and University of Applied Sciences Upper Austria.

Keynote: Collaborative Data Experiences: Novel designs for visualizing and exploring data together

Hans-Christian Jetter, UAS Upper Austria, Campus Hagenberg, AT

Abstract

We are witnessing an unprecedented exponential growth in the data that we create and that we are exposed to in our daily lives. This trend towards "Big Data" promises novel applications that could revolutionize business, administration, policy making, and science. To let users experience and make sense of this data, there is already a lot of research on the algorithmic side, e.g., new methods for data mining, machine learning, etc. There is, however, much less work on how to visually communicate and present results in an "intuitive" and interactive manner, especially to groups of casual or non-expert users.

I will show different examples from my research work that demonstrate how the careful design of interaction and visualization techniques can substantially improve our human-data interaction with visualizations, for example by enabling groups of users to collaborate using visual-tangible user interfaces on interactive tabletops or by working seamlessly across many mobile devices in "bring your own device scenarios". I will illustrate how a combination of applied informatics, design, and user research can help us to better understand how humans interact with data and achieve a much improved collaborative human-data experience.

Biographie

Hans-Christian Jetter is a computer scientist and Professor of User Experience and Interaction Design at the University of Applied Sciences Upper Austria, Campus Hagenberg. Before joining Hagenberg, Christian worked as a post doc with Yvonne Rogers at the University College London in the Intel Collaborative Research Institute for Sustainable Connected Cities. Christian also worked as research intern and research visitor at Microsoft Research Cambridge where he explored the use of novel collaborative tools for scientists of the NanoPhotonics Centre of the University of Cambridge. He received his PhD (summa cum laude) and M.Sc. & B.Sc. in Information Engineering from Harald Reiterer at the Human-Computer Interaction Group of the University of Konstanz.

Capstone: Pervasive Technologies to Enrich People Experience in Visiting Cultural Heritage sites

Paolo Buono, University of Bari Aldo Moro, IT

Abstract

Various empirical programs have been carried out worldwide with the aim of kindling people's interest in visiting Cultural Heritage (CH) sites. This talk narrates the research conducted at Interaction, Visualization and Usability (IVU) Lab of the University of Bari (Italy) that investigates the use of different technologies to ensure more engaging visit experiences at Cultural Heritage (CH) sites and to increase the appropriation of CH content by visitors. Initially, pervasive games using mobile devices were developed to break away from the usual static paradigm of room play and go towards a more dynamic and social experience. Such games addressed young students and aimed at stimulating them to acquire knowledge during visits at CH sites. Technological advances led us to introduce large multitouch displays in school activities to reflect and deepen gained knowledge.

Furthermore, the growing availability of smart objects has stimulated us to use the Internet of Things technologies in the CH domain. There are very few approaches trying to facilitate the adoption of such technologies by end users, who are required to define the behavior of smart objects but they might not have any skill in programming. A visual composition paradigm that allows non-programmers to synchronize the behavior of smart objects was defined, in order to comply with the need of curators and guides of CH sites to define smart visit experiences. A serious game has been used to show the potential of the visual composition paradigm approach. The talk ends by discussing technological solutions and future challenges.

Biographie

Paolo Buono is an Assistant professor and a member of the IVU (Interaction, Visualization, Usability and UX) lab at the Department of Informatics of the University of Bari Aldo Moro. His current research focuses on HCI, specifically in information visualization, mobile applications, time series. His research has been also involved in other domains such as visual analytics, video analysis and telementoring. He has been involved, at different levels of responsibility, in several European, national and regional projects in various domains, including: environment, logistics, cultural heritage, healthcare. He holds a PhD in Computer Science from the University of Bari, Italy. He has been visiting scientist at various research centers including: AVIZ research group (F), Human-Computer Interaction Lab of the University of Maryland (USA), Fraunhofer IPSI (D). He has organized several HCI conferences, such as AVI (2016, 2004), IS-EUD 2011, INTERACT 2005. He is one of the inventors of the Patent No. 1401512 concerning a multimedia framework and a method to support the visit of a site of interest, such as an archaeological park.