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Profile

An interaction designer and a doctoral researcher in human-computer interaction. My current research focuses on the design and evaluation of user interfaces for information exploration. My background includes design, development and prototyping of playful systems, tangible devices, interactive installations, as well as graphic design and typography.

Education

Aalto University, Media Lab, Helsinki, PhD studies, Human-Computer Interaction, supervisor: Lily Diaz, since 2014

University of Applied Sciences of Western Switzerland (HES-SO), Geneva Master of Arts in Design, Media Design, 2013

Geneva University of Arts and Design (HEAD-Genève) Bachelor of Arts in Design, Visual Communication, 2006

Experience

Doctoral Researcher,

Helsinki Institute for Information Technology HIIT 2014-Present
Research on human-computer interaction within the Ubiquitous Interaction
group, under supervision of Prof. Giulio Jacucci.

Designer, Etsimo LTD, Helsinki

R&D on user interfaces for information discovery.

Design and implementation of demonstration systems.

Teacher, CPNV Professional school, Yverdon-les-Bains 2013-2014 Weekly lectures with assignments and evaluation, on photo, video and typography to five classes (75+ students).

Sales Associate, Apple, Geneva 2012-2013
Trainer on workshops and One to One sessions for customers on Apple devices. Technical support on devices.

Freelance Interaction and Media Designer, Geneva 2010-2012 Interactive installations for public exhibitions and stage engineering for choreographer Cindy Van Acker. Research Assistant, Geneva University of Art and design 2010-2012

Project KM4MK. User interface development for an iOS educational app.

Project GAVI. User interface development for an interactive guide for museums on Android. Supervisor: Jérôme Baratelli

Freelance Graphic Designer, Geneva

2006-2010

Responsible for the whole visual communication needs of OSR, most important symphonic orchestra of Western Switzerland. Editorial design for local publishing houses.

Research Assistant, Bern University of Art and Design (HKB) 2008-2009 Project Zwischensaison. Collaborative research on creating an archive standard for hotel business.

Skills

Problem solving / Design thinking

Most of my work and past experiences have been widely interdisciplinary. As a designer, my expertise allows me to make sense of available skills, technologies and expectations, to come up with original and grounded ideas, tested and iterated through quick prototyping.

Software development

My developing skills using many common programming languages (C, C++, Java, Python, JS, etc.) make me autonomous in the prototyping of interactive systems. My code demonstrated its robustness in many critical contexts such as public demonstrations, exhibitions, performances and user-studies. And my experience in collaborative development taught me to make it legible and modular.

Hardware prototyping

Through many projects, I have successfully experimented with custom hardware interfaces, like controlling arrays of powerful and precise motors through software, or using real world analog signals as input such as motion or sound, to explore new ways of interacting with machines.

User-Interface and Data Visualization

As a designer, I have had the opportunity to develop several conventional user interfaces for mobile applications. Today, through my research, I focus on developing entity based interfaces using data visualization principles that allow the user to interact with data directly. My design work gets evaluated through systematic user-studies.

User-based Evaluation

My research in human-computer interaction relies on frequent user-studies to evaluate each new interface design. Such evaluation is a thorough process that requires a careful planning and execution of the study design, recruitment phase, data gathering, analysis and reporting

Academic writing
See publication list.

Visual communication

My education and work as a graphic designer in Switzerland gave me both the technical and conceptual skills to communicate ideas and products over many media, print, video or interactive.

Publications

Designing for Exploratory Search on Touch Devices

Khalil Klouche, Tuukka Ruotsalo, Diogo Cabral, Salvatore Andolina, Andrea Bellucci, and Giulio Jacucci. 2015. In Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems (CHI '15). ACM, New York, NY, USA, 4189-4198.

IntentStreams: Smart Parallel Search Streams for Branching Exploratory Search

Salvatore Andolina, Khalil Klouche, Jaakko Peltonen, Mohammad Hoque, Tuukka Ruotsalo, Diogo Cabral, Arto Klami, Dorota Głowacka, Patrik Floréen, and Giulio Jacucci. 2015. In Proceedings of the 20th International Conference on Intelligent User Interfaces (IUI '15). ACM, New York, NY, USA, 300-305.

InspirationWall: Supporting Idea Generation Through Automatic Information Exploration

Salvatore Andolina, Khalil Klouche, Diogo Cabral, Tuukka Ruotsalo, and Giulio Jacucci. 2015. In Proceedings of the 2015 ACM SIGCHI Conference on Creativity and Cognition (C&C '15). ACM, New York, NY, USA, 103-106.

Interaction Techniques for Wall-Sized Screens

Lars Lischke, Jürgen Grüninger, Khalil Klouche, Albrecht Schmidt, Philipp Slusallek, and Giulio Jacucci. 2015. In Proceedings of the 2015 International Conference on Interactive Tabletops & Surfaces (ITS '15). ACM, New York, NY, USA, 501-504.

Academic Teaching

University of Helsinki, Computer Science, Graduate School
Lectures on User Interface Design, Human-Computer Interaction, 2014-2015
Project tutoring Advanced pen inputs, Interactive Technologies, 2014.

Tutorial Processing P5, Interactive Systems, 2015.

Tutorial Arduino, Interactive Systems, 2015.

Tutorial Video pitching for research submissions, Interactive Systems, 2015.

Presentations and Organization Committees

Article presentation, Designing for Exploratory Search on Touch Devices at CHI conference, Seoul, 2015.

Presentation of own research *Relevance Mapping and Re-Ranking* within HCI Helsinki seminar, 2015.

Presentation of own research User Interfaces within Media doctoral program seminar, Aalto University, 2015.

Presentation on Sensemaking at Helsinki Institute for Information Technology HIIT Frameworks Workshop, 2015

Presentation and demonstration of a prototype within seminar Information systems in knowledge work, at Finnish National Museum, 2014.

Organization committee, 3rd International Workshop on Symbiotic Interaction, 2014.

Featured Work and Exhibitions

Drift, Cindy Van Acker

Skycam-like installation for a choreographer in Geneva, 2013. Engineering and software development. With Victor Roy.

Grand National. Installation.

Presented at Design Days, Geneva, 2013.

Knock-Knock. Installation.

Featured on (selection):

Creative Applications,

Gizmodo.com,

FastCo,

RollingStone Russia,

It's Nice That,

Design Boom,

Prote.in,

<u>Vimeo</u> (50'000+ views)

Swiss TV (Nouvo, RTS, 2013)

Presented at:

Lift conference, Geneva, 2013.

Exhibition Touch!, MUDAC, Lausanne, 2012.

Laser Cabinet, a Chalet Arcade. Installation.

Presented at:

Horizon, MoCA Los Angeles, 2013.

UCLA Game Festival in Los Angeles, 2013.

Game Gazer exhibition at Swissnex in San Francisco, 2013.

Lift conference in Geneva, 2012.

Featured on Swiss TV (Nouvo, RTS, 2012).