

Marc Teyssier

Principal Investigator,

Resilient Futures Group

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Curriculum Vitae

Research

In my research I question the relationship between technology and humans through human-like devices. These devices are augmented with human qualities help us investigate future interfaces where cold and static technologies are replaced with dynamic and malleable interfaces.

During my PhD I explored this concept by developing interfaces for mediated communication through touch in human-computer interaction. This requires to understand affective touch communication to design and develop meaningful new input and output interactions.

Education & Academic experience

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| Feb 2021 - Now | Principal Investigator, Resilient Future Group in De Vinci Innovation Center
Working on Biomaterials, Low Tech and creating Resilient Technologies |
| Feb 2020 – Feb 2021 | Postdoctoral Researcher in Saarland University – HCI Group
Working on Anthropomorphic Interfaces, On-Skin Interfaces and Interactions |
| Jan 2017 - Feb 2020 | Ph.D. Thesis at Télécom Paris, from Institut Polytechnique de Paris
Topic: “Anthropomorphic Devices for Affective Touch Communication.”
Advisors: Eric Lecolinet, Gilles Bailly, Catherine Pelachaud |
| Jan-Apr 2019 | Visiting Researcher at University of Bristol – Bristol Interaction Group |
| Apr- Dec 2016 | Research Engineer at Télécom Paris |
| Apr- Oct 2015 | Visiting Research Assistant at MIT Media Lab – Fluid Interfaces Group |
| 2014 - 2015 | Master Degree in Engineering and Innovation – Arts et Métiers ParisTech (Laval, France) |
| 2013 - 2015 | Master Degree in Design and Virtual Reality at L’École de Design de Nantes (France) |
| 2011 - 2013 | Bachelor Degree in Interaction Design at L’École de Design de Nantes (France) |

Publications

- [13] **Eyecam: Revealing relations between humans and sensing devices through an anthropomorphic webcam**
M Teyssier, M Koelle, P Strohmeier, B Fruchard, J Steimle
Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems
- [12] **Human-Like Artificial Skin Sensor for Physical Human-Robot Interaction**
M Teyssier, B Parilusyan, A Roudaut, J Steimle
2021 IEEE International Conference on Robotics and Automation (ICRA)
- [11] **Conveying Emotions Through Device-Initiated Touch**
M. Teyssier, G. Bailly, C. Pelachaud, E. Lecolinet
In IEEE Transactions on Affective Computing, 2020
- [10] **PolySense: Augmenting Textiles with Electrical Functionality using In-Situ Polymerisation.**
C. Honnet, H. Perner-Wilson, **M. Teyssier**, B. Fruchard, J. Steimle, A. C Baptista, P. Strohmeier
In CHI'20: Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems, ACM (2020); 04/2020
- [9] **Skin-On Interfaces: A Bio-Driven Approach for ArtificialSkin Design to Cover Interactive Devices.**
M. Teyssier, G. Bailly, C. Pelachaud, E. Lecolinet, A. Conn, A. Roudaut.
In UIST'19: Proceedings of the ACM Symposium on User Interface Software and Technology, ACM (2019).
- [8] **MobiLimb: Augmenting Mobile Devices with a Robotic Limb.**
M. Teyssier, G. Bailly, C. Pelachaud, E. Lecolinet.
In UIST'18: Proceedings of the ACM Symposium on User Interface Software and Technology, ACM (2018). 53-63.
- [7] **VersaPen: An Adaptable, Modular and Multimodal I/O Pen.**
M. Teyssier, G. Bailly, E. Lecolinet.
In CHI'17 Extended Abstracts: ACM SIGCHI Conference on Human Factors in Computing Systems, ACM (2017). 2155-2163.
- [6] **VersaPen: Exploring Multimodal Interactions with a Programmable Modular Pen.**
M. Teyssier, G. Bailly, E. Lecolinet.
In CHI'17 Extended Abstracts (demonstration): ACM SIGCHI Conference on Human Factors in Computing Systems, ACM (2017). 377-380.
- [5] **Revue et Perspectives du Toucher Social en IHM.**
M. Teyssier, G. Bailly, E. Lecolinet, C. Pelachaud.
In IHM'17: Conférence francophone sur l'Interaction Homme Machine, ACM (2017).
- [4] **Investigating the Design Space of Smartwatches Combining Physical Rotary Inputs.**
E. Brulé, G. Bailly, M. Serrano, M. Teyssier, Th. Jacob, S. Huron.
In HM'17: Conférence francophone sur l'Interaction Homme Machine, ACM (2017).
- [3] **Desktop Orbital Camera Motions Using Rotational Head Movements.**
Th. Jacob, G. Bailly, E. Lecolinet, G. Casiez, M. Teyssier.
In SUI'16: ACM Symposium on Spatial User Interaction, ACM (2016). 139-148.
- [2] **Reality editor**
V. Heun, E. Stern-Rodriguez, M. Teyssier, P. Maes
Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors ...
in Computing Systems, 4p
- [1] **ArLive: unified approach of interaction between users, operable space and smart objects**
M. Teyssier, G. Cliquet, S. Richir
Proceedings of the 2016 Virtual Reality International Conference, 21

Exhibitions and Medias

WEIRD SENSATION FEELS GOOD, Skin-On Interfaces, Swedish design museum **ArkDes**, Apr'-Nov'20 ,
Voice Of Touch, London Design Museum, May 2022 – October 2022

Topographie Digitale, Ars Electronica 2020 Nomination

Skin-On Interfaces in Press, Oct'19

BBC. Phone case created out of artificial skin

CNN. This phone case looks and feels like human skin

New Scientist. Creepy human-like skin makes your phone ticklish and pinchable

Other press for SkinOn include. *CNET, Digital Trend, Evening Standard, Fox News, The Independent, USA Today, Daily Mail, Fast Company, 01Net, TechSpot, ZDNet ...*

MobiLimb in Press, Oct'18

BBC. Feely finger phone crawls across desk

New Scientist. Smartphone with a finger crawls across the table to stroke your wrist

Reuters. A wagging finger sticking out of your mobile phone is creepy. Why?

The Verge. This robotic finger attachment for your smartphone will gently caress your hand

Digital Trend. Give your phone the finger with this creepy, versatile robotic attachment

Other press for MobiLimb include. *The Independent, PC Mag, Daily Mail, Fast Company, 01Net, TechSpot, ZDNet ...*

Other Projects

ArLive, at Design Expo Nov'15 –Jan'16, Nantes

Stuart, at IVRC'14, Tokyo

Stuart, at Laval Virtual '14, France [Best Demo]

Motion Drawing, at Laval Virtual'12, France

Okyp. Prosthetic Knowledge, Leap Motion blog

Teaching

Lectures 2016-Now	HCI & Robotics . Fundamental of Human-Robot Interaction, Actuators, Fabrication and Motor Control Prototyping tools . Fundamental of design tools and software for prototyping (Including HTML/CSS, Arduino, 3D modeling and printing, Photoshop, Illustrator, Video...) Arduino . Introduction course to hardware engineering through Arduino Introduction to Academic Research . Introduction to academic research for Design M.Sc. students.
TAing 2016-2018	Data visualization . Theory and programing (D3.js and processing) Human-Computer Interaction theory and programming (Java)

Volunteering

Organization Committee	ACM Augmented Human 2021 – Organization Chair ACM UIST 2018 – Web & Design Co-Chair
Reviewing	CHI '18, '19, '20, '21, '22 UIST '17, '18, '19, '20, '21 MobileHCI '18, '19, '20
Student Volunteer	CASA '19, AVA'19 UEIS '17 - Organization of the event, design of the visual guidelines HCI and AI day - Helping for the organization of the event

Professional experience

Apr 2016 – Jan 2017	Télécom ParisTech - Research Engineer Helping Ph.D students developing prototypes & applications
July 2013 – Dec 2015	Freelance – Web & Graphic Designer Interface design and web development fullstack
July 2014 – Sep 2014	Alkemi – Interaction Designer Intern Ui/Ux design for games, JS developer (<i>Clients include Sony, ...</i>)
Sep 2013 – Feb 2014	Allofus – Creative Technologist Intern User experience research and development (<i>Clients include Samsung, Nestle, ...</i>)

References

1. Anne Roudaut
Senior Lecturer, Bristol University

roudauta@gmail.com

3. Pattie Maes
Professor, MIT Media Lab,
Fluid Interfaces

pattie@media.mit.edu

2. Gilles Bailly
CNRS Researcher, Sorbonne Université

gilles.bailly@sorbonne-universite.fr

4. Grégoire Cliquet
Director of Human-Machine designlab
L'Ecole de design Nantes Atlantique

g.cliquet@lecolededesign.com