

# Creative Design

Hands-on course

>>> reviews a range of themes in creativity and interactive art in HCI used to inspire creative thinking and express ideas.

>>> requires students to read, reflect and and share their findings on a selection of weekly readings (research papers) that explore the creative themes.

>>> requires students to accomplish 1 project, emphasizing quantity and novelty of concepts over implementation quality.

**THEMES / CONCEPTS**

**>>> READINGS**

# New / Creative Media

- L. Manovich, "The Language of New Media", Cambridge MA, MIT Press, 2001 [Chapter 1]
- W. Benjamin. "The Work of Art in the Age of Mechanical Reproduction" [pages. 319-333] from Photography in Print, Writings from 1816 to the Present, ed. Vicki Goldberg, Simon and Shuster, New York NY, 1991



# Embodied Interaction

- Paul Dourish, "Embodied Interaction: Exploring the Foundations of a New Approach to HCI", special issue of Transactions on Computer-Human Interaction on "HCI in the New Millennium.
- David Kirsh, "Embodied Cognition and the Magical Future of Interaction Design", ACM ToCHI 2013



# The Moving Body and Choreography



- S. Fdili Alaoui, B. Caramiaux, M. Serrano, F. Bevilacqua. "Movement qualities as interaction modality", In Proceedings of ACM Conference on Designing Interactive Systems (DIS) 2012
- Loke L. and Robertson T. (2008) Inventing and Devising Movement in the Design of Movement-based Interactive Systems. In Proceedings of OZCHI 2008, pp. 81-88.

# Interactive Musical Interfaces

- B. Caramiaux, A. Altavilla, S. Pobiner, A. Tanaka, "Form Follows Sound: Designing Interactions from Sonic Memories", Proceedings of the ACM Conference on Human Factors in Computing Systems, CHI'15.
- Zappi, Victor and McPherson, Andrew "Dimensionality and Appropriation in Digital Musical Instrument Design." In Proc. NIME, 2014.



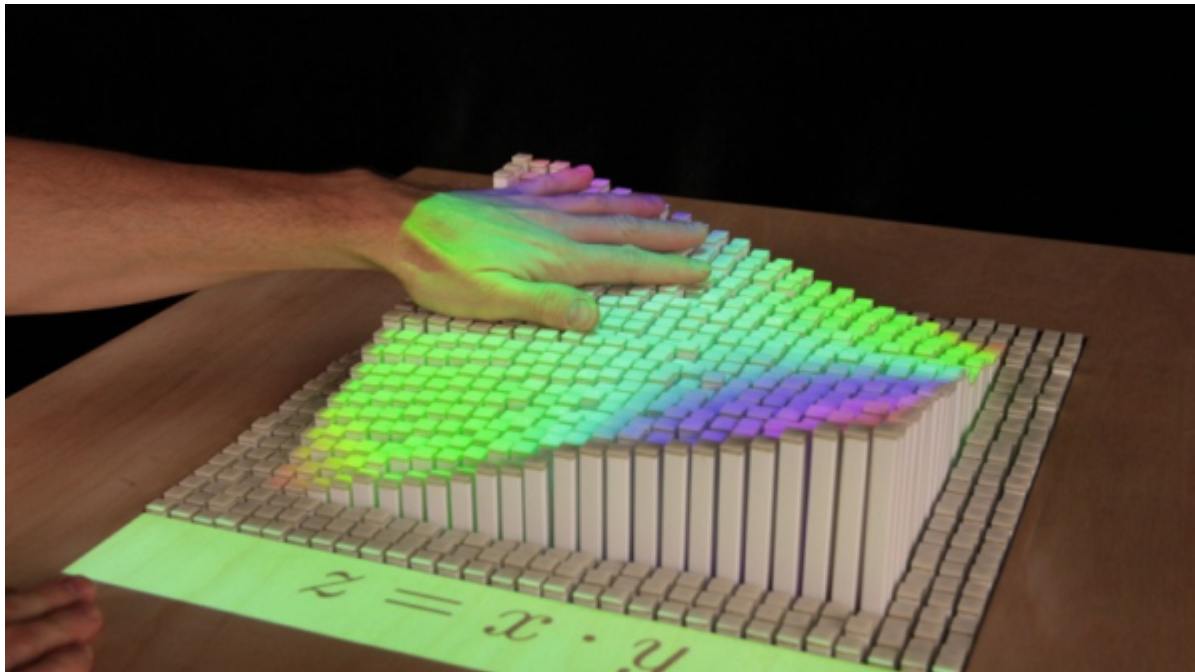
# Creativity and Aesthetics



- P. Wright, J. Wallace and J. McCarthy, J. (2008). "Aesthetics and experience centered design". ACM Transactions on Computer-Human Interaction (TOCHI), 15(4)
- M. Petersen, O. Iversen, O. Krogh, and M. Ludvigsen (2004). "Aesthetic interaction: a pragmatist's aesthetics of interactive systems". In Proceedings of the ACM Conference on Designing Interactive Systems (DIS).

# Tangible Interaction

- H. Ishii and B. Ullmer, "Tangible bits: towards seamless interfaces between people, bits and atoms", Proceeding of of the ACM Conference on Human factors in computing systems CHI'97/
- Jordà, S., Geiger, G., Alonso, M., Kaltenbrunner, M. (2007). "The reacTable Exploring the Synergy between Live Music Performance and Tabletop Tangible Interfaces". In Proceedings of the ACM 1st Tangible and Embedded Interaction conference (TEI) 2007 paper



# Interactive Performance

- Dixon, S. (2007). "Digital performance: a history of new media in theater, dance, performance art, and installation". MIT press. [Chapter 1]
- Salter, C. (2010). "Entangled: Technology and the Transformation of Performance". MIT Press. [Chapter 6 – Bodies]
- Reeves, S., Benford, S., O'Malley, C. and Fraser, M. (2005). "Designing the spectator experience". In Proceedings of the ACM Conference on Human Factors in Computing Systems CHI'05.



# Applications / Projects

- We will apply these concepts in practice. The goal for the students is to master the use of the theoretical principles in the design of an interactive artwork.
- Every week, students will have the responsibility of presenting a paper.
- Students will be expected to prototype an interactive artifact and analyze and describe their design decisions, specifying their use of the design concepts drawn from the weekly reading.

# Learning Outcomes

- Identify the key principles of Creative Design across a range of related texts.
- Apply these key principles in the design of interactive artifacts.
- Conduct a project about the design and “evaluation” of your interactive creative artwork.
- Participate substantively in discussions across the range of texts included in the course readings.

# PROJECTS EXHIBITION

From students of the Masters in Human Computer Interaction + Design

**Yearly Exhibition with  
your artworks in a  
gallery or an iconic  
place in Paris Sud.**

<https://>

[www.facebook.com/](https://www.facebook.com/PROTO204/videos/878420012340466/)

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**January, 23rd 2018**  
**From 5pm to 7pm**

Anyone curious about HCI is welcome!

**PROTO 204**

204 rue André Ampère  
91 440 Bures-sur-Yvette

Register here



# Opening Exhibition



**2nd February from 4.30PM to 6.30 PM**

room 36 downstairs in the reception hall of digiteo building  
building 660 - noetzlin street 91 191 gif sur yvette cedex

**interactive artwork + fabrication**

u-psud m2 m1 interaction hcid students  
creative design + digital fabrication + design project