

Natural User Interfaces

A photograph showing a person's hands interacting with a water-based natural user interface. The hands are positioned over a series of small, vertical water jets that are arranged in a grid pattern. The water is splashing and creating a dynamic, tactile environment. The background is dark and out of focus, emphasizing the interaction with the water.

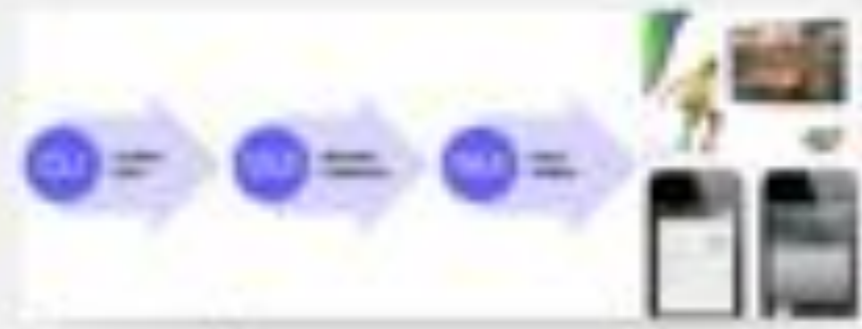
atelier think-tank Imaginove
4 juillet 2013

objectifs

- ▶ Montrer et explorer les enjeux d'usage concernant les NUI
- ▶ Débattre des possibilités de création basées sur les technologies actuelles, pour en mesurer les opportunités, les limites et les enjeux.
- ▶ Le but final consistera à faire ressortir un ensemble de trajectoires possibles et d'opportunités innovantes



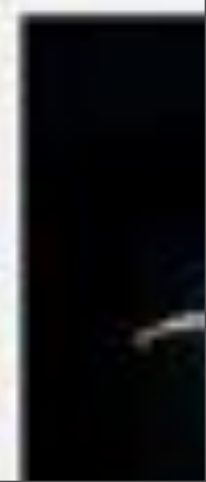
Kinect

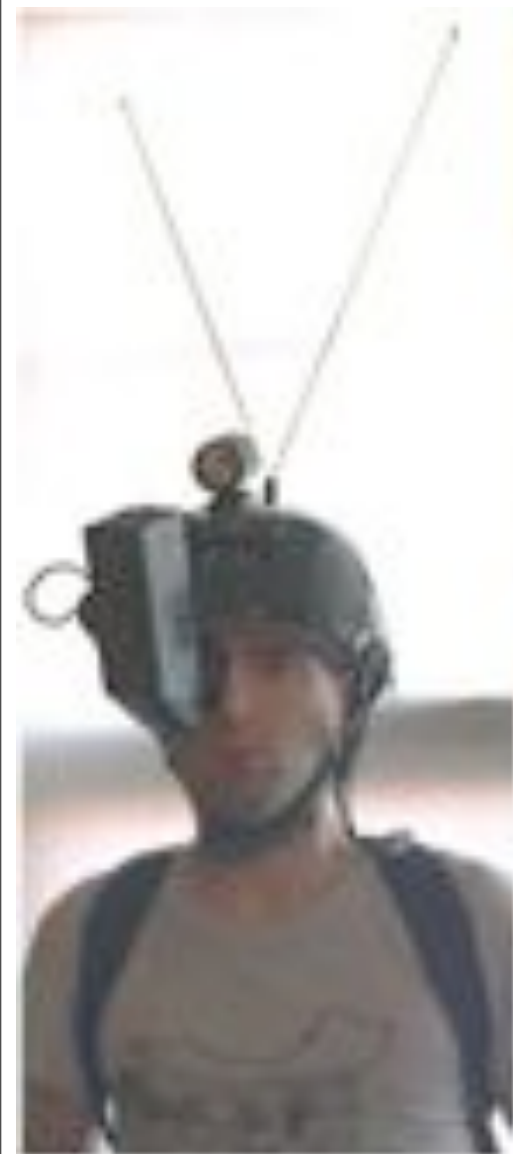


Examples



Organic User Interface





1980



1985



1991



1995



1998









Scholar

About 1,310 results (0.04 sec)

Articles

[Natural user interfaces](#)[A Câmara - Human-Computer Interaction-INTERACT 2011, 2011 - Springer](#)

Legal documents

Abstract Recent developments in user-input technologies are changing the way we interact with digital screens. The mouse and the keyboard are being replaced by touch and motion based interfaces, increasingly known as **Natural User Interfaces (NUI)**. YDreams has ...

[Cited by 2](#) [Related articles](#) [All 3 versions](#) [Cite](#)

Any time

Since 2013

Since 2012

Since 2009

Custom range...

[\[PDF\] Natural User Interfaces](#)[G Steinberg - ACM SIGCHI Conference on Human Factors in ..., 2012 - cs.auckland.ac.nz](#)

ABSTRACT In this report I have discuss the works of 6 papers in the field of **natural user interfaces**. They all discuss different interaction techniques and how effective they are. Most of the current literatures, within 4-5 years discuss techniques for touch screens or ...

[Cited by 1](#) [Related articles](#) [All 3 versions](#) [Cite](#) [More +](#)

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 include patents include citations[Natural user interfaces are not natural](#)[DA Norman - interactions, 2010 - dl.acm.org](#)

New conventions will be developed. Thus, although it was easy to realize that a flick of the fingers should cause an image to move, the addition of "momentum," making the motion continue after the flicking action has ceased, was not so obvious. (Some recent cell ...

[Cited by 61](#) [Related articles](#) [Cite](#) Create alert[\[BOOK\] Brave NUI world: designing natural user interfaces for touch and gesture](#)[D Wigdor, D Wilson - 2011 - books.google.com](#)

Touch and gestural devices have been hailed as next evolutionary step in human-computer interaction. As software companies struggle to catch up with one another in terms of developing the next great touch-based interface, designers are charged with the daunting ...

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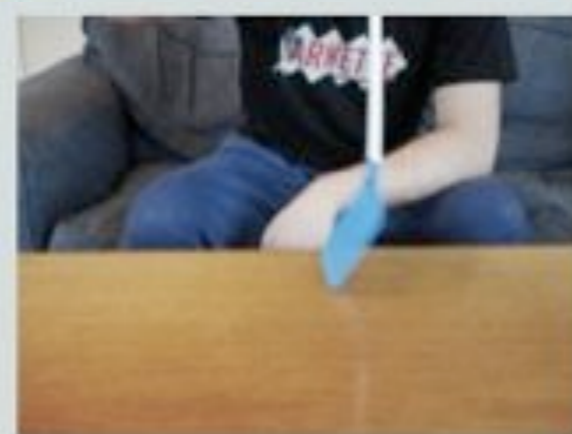
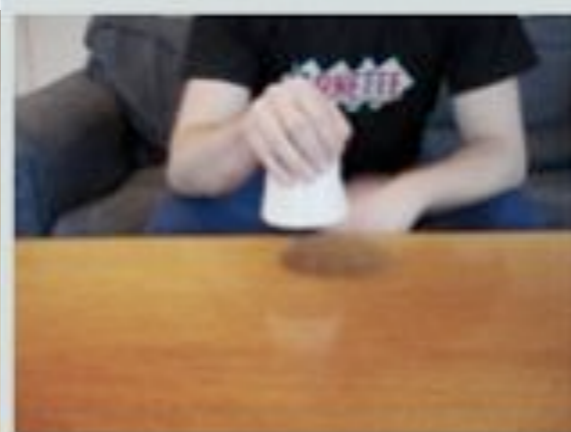
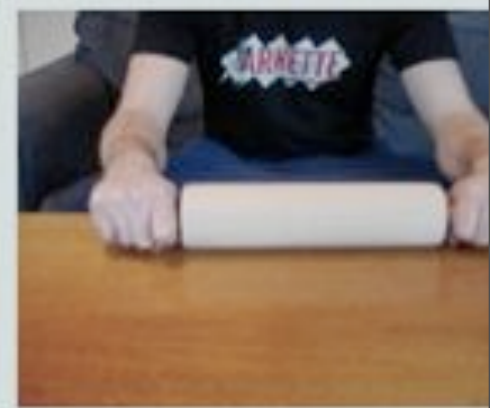


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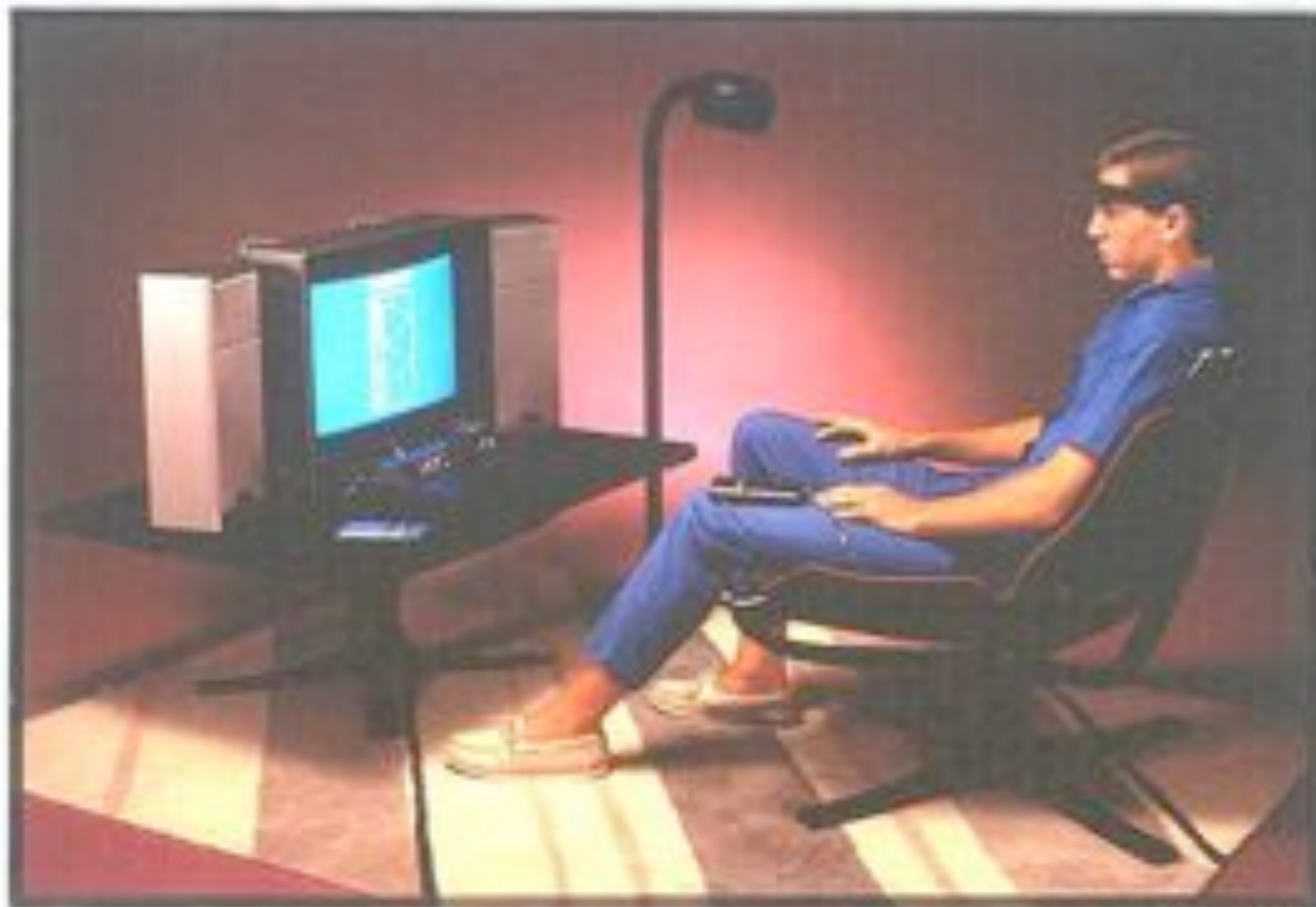














enjeux d'utilisation: avantages

- ▶ interaction “naturelle”: faible courbe d'apprentissage
- ▶ interaction “directe”: du point de vue cognitif, le corps devient le point d'entrée (moins d'intermédiaires)
- ▶ variété et sensibilité

enjeux d'utilisation: inconvénients

- ▶ fatigue : effort physique, “gorilla syndrome”
- ▶ les interactions ne sont pas toujours explicites
- ▶ problème d'immersion: si chaque geste est capturé, qu'en est-il des interactions non intentionnelles ?
- ▶ segmentation des mouvements: quel découpage pour des interactions continues ?
- ▶ différences culturelles ?





activité I

- ▶ Lister sur des post-its des technologies/produits NUI pertinentes de votre point de vue (une part post-it)
- ▶ 5'

activité 2

- ▶ Lister sur des post-its des contenus et interactions pertinentes/amusantes/ adaptés à la manipulation par des NUI
- ▶ 5'

activité 3

- ▶ Former des groupes de 3, chaque groupe reçoit 1 post it “technologie” et deux “contenus” et doit imaginer comment les combiner pour produire une proposition innovante.
- ▶ Décrire cette proposition avec les éléments suivants: nom du projet, scénario d’usage (comment l’utiliser, que se passe-t-il? quelle participation pour les utilisateurs?), cible, avantages en regard de technologies antérieures
- ▶ 25’

activité 4

- ▶ Présentation orale des propositions de chaque groupe
- ▶ Lister (individuellement sur deux post-its) les avantages (post-it 1) et inconvénients (post-it 2) de chaque proposition.