



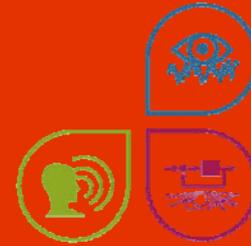
gipsa-lab

Grenoble | images | parole | signal | automatique | laboratoire



Petit-déjeuner PERSYVAL-MINALOGIC

Interfaces Cerveau-Ordinateur, entre science-fiction et réalité.



Marco Congedo, CNRS, GIPSA-lab (Grenoble)



Interfaces d'entrée homme-ordinateur

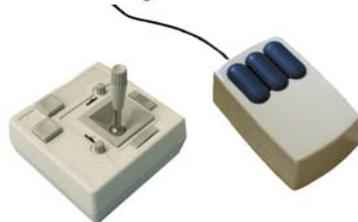
1960

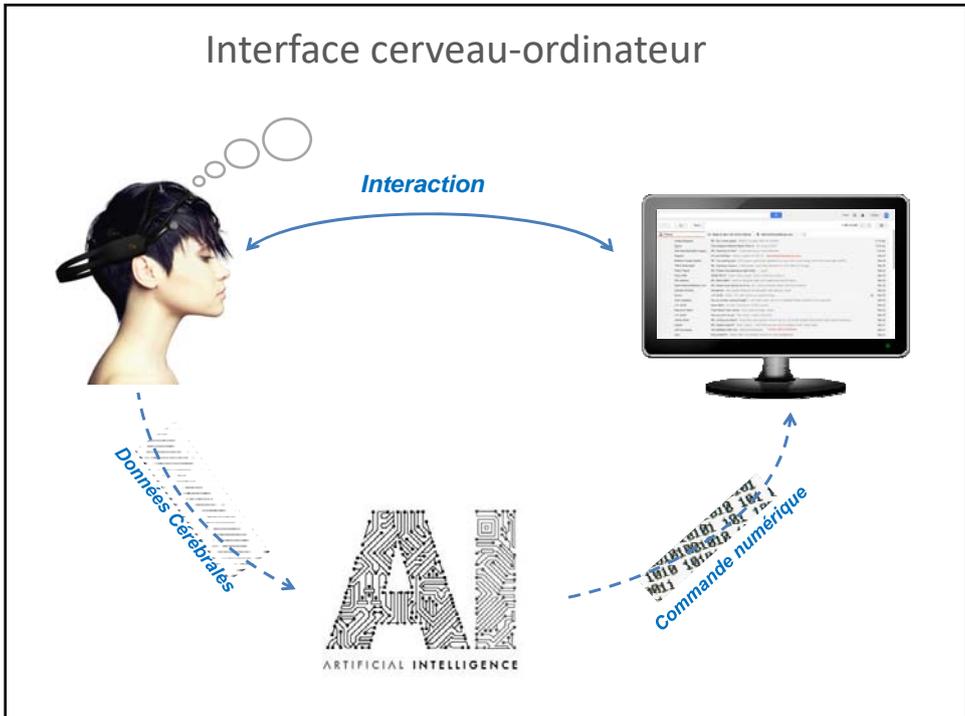
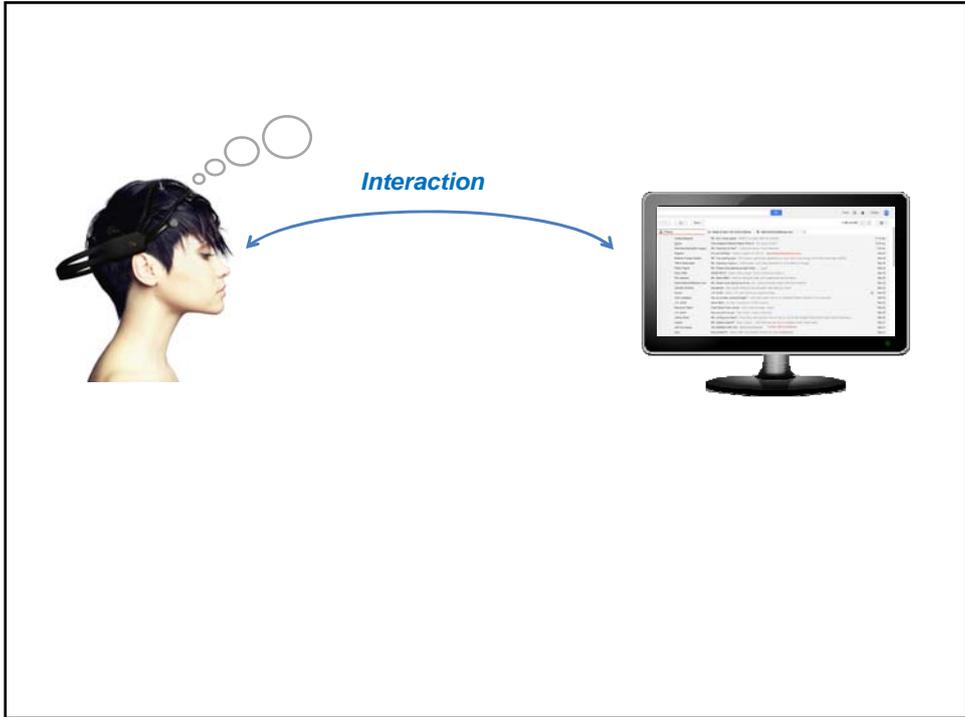
...

...

2000

2010





Domaines d'Application



Rétablissement de la motricité



Aide à la communication

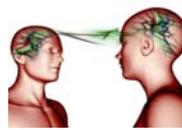


Mobilité

Pour la santé



Entraînement cérébral



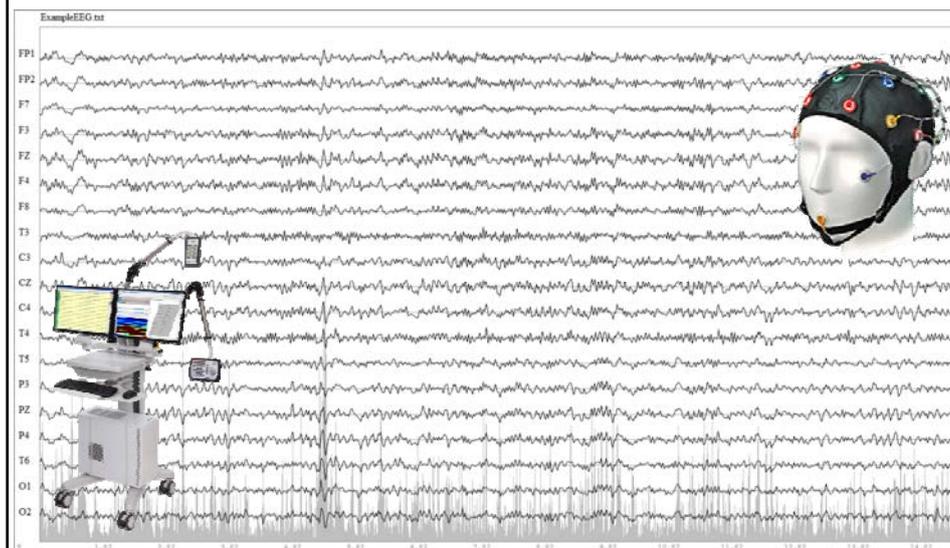
Communication intelligente et monitoring cognitif



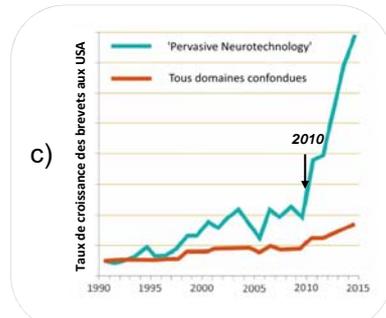
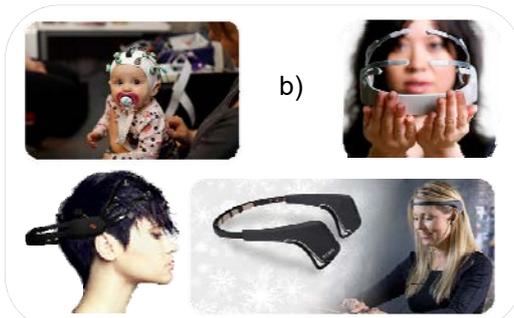
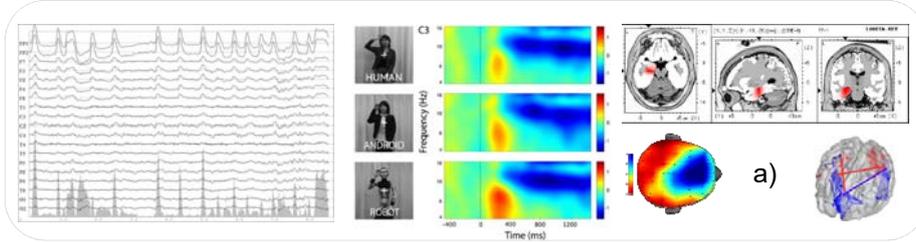
Divertissement

Grand public

Électroencéphalographie (EEG)



EEG: les neurosciences s'ouvrent au public



Exemple de BCI non-invasive



Rétablissement de la motricité



Aide à la communication

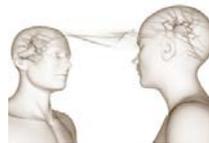


Mobilité

Pour la santé



Entraînement cérébral



Communication intelligente et monitoring cognitif

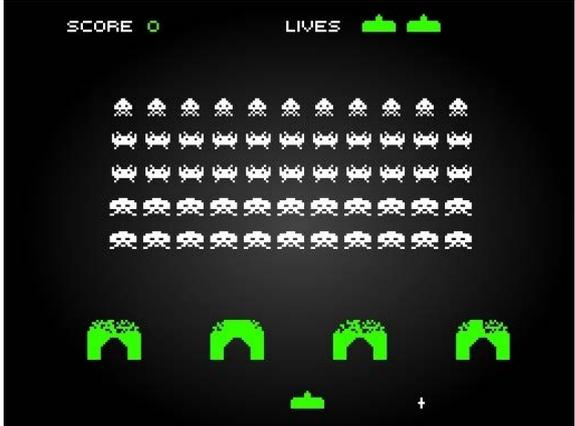


Divertissement

Grand public

Space Invaders (1978)

- 500 M\$ de royalties
- L'un des jeux vidéo les plus populaire au monde

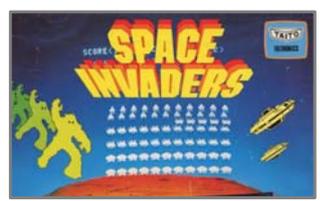
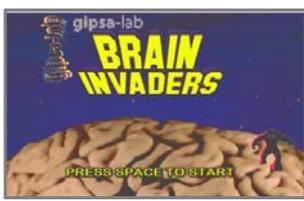


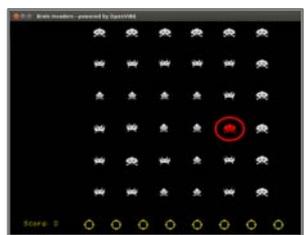






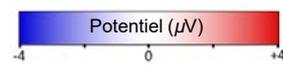
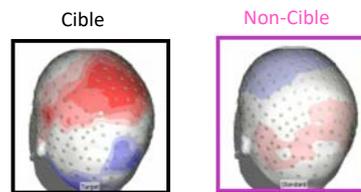
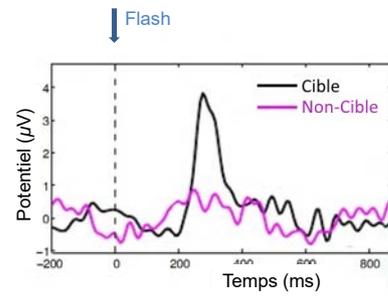
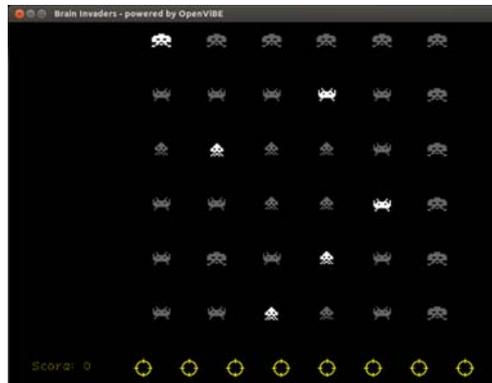


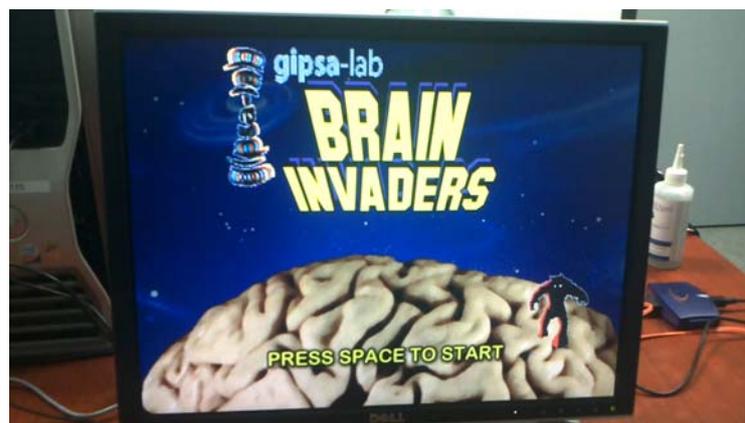





Fonctionnement du Space Invaders



Brain Invaders: Démonstration



Exemple de BCI invasive



Rétablissement de la motricité



Aide à la communication

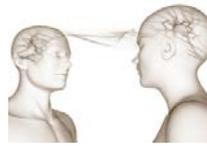


Mobilité

Pour la santé



Entraînement cérébral



Communication intelligente et monitoring cognitif



Divertissement

Grand public

Le Projet BCI de CLINATEC

