

The Institut Cognition offers a one-stop shop in bilateral research in cognition to provide competitive innovation solutions for companies in a multidisciplinary approach. Cognitive technologies increase the added value of products and services in an increasingly personalised context of use: taking into account the user, his environment and the modes of interaction that are at stake. They integrate the factors that result from knowledge about cognitive functions and human behaviour: EMOTION - PERCEPTION - ATTENTION - MEMORY - MEMORY - DECISION - REASONING - LANGUAGE - VISION - STRESS - DEVELOPMENT - HEARING - TOUCHING

www.institut-cognition.com

# Bring people into your technologies to increase your company's potential for innovation

## The Cognition Institute's 4 main areas of R&D activities:

Cognitive enhancement technologies: Increasing cognitive capacities (improvement, assistance, remediation, substitution) through integrative multidisciplinary approaches (psychophysics, neurophysiology, imagery, computational models, virtual realities).

**Cognitive behavioural assessments:** Using the methods and tools of neuroscience, psychology and ergonomics to assess systems and devices and characterise their acceptability and uses (natural interaction, VR/RA, design and creation, MMI, post-wimp for MMI, cognitive state of the user, etc.).

**Collective cognition:** Study natural and artificial interactions in different contexts (emotional, cultural...) in order to understand the underlying processes (social cognition, emotional regulation in individual and social contexts, stereotypes, human-human/animal/virtual agents/robots interactions).

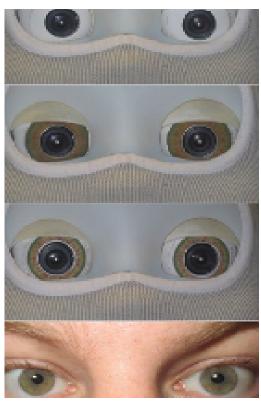
**Cognition & language:** Taking into account linguistic cognitive processes in automatic language processing systems (speech, language and languages, learning, multimodality, gesturality, multilingualism, assisted translation, affects, language and speaker identification, conversational agents).

Artificial Intelligence, coupled with Natural Intelligence, is transverse to these 4 main areas of R&D.



#### **Target markets**

- IT, media and telecommunications
- Health, e-health and autonomy
- Leisure & sports, education and training, e-commerce, home automation domotique
- Transport





#### The main equipment or platforms:

- Platform for the design and testing of innovative man-machine interfaces and RV-RA
- Cognitive physiology platform for human monitoring
- > Platform for the study of the use of interactive systems in specific and intelligent environments.
- Platform for the simulation of social and collective cognition scenarios
- > Platform for the study of neur-inspired and augmented systems

#### The Cognition Institute's research units

Its research units: IJN, LSCP, LSP, CHArt, EnsadLab, Centre BORELLI, LaPEA, COSTECH, LIMSI, SCALab, LEAD, GIPSA Lab, LIG, LPNC, LIA, LPC, LPL, LNC, IMS, IRIT, CRCA and CeRCA



### **Key Figures**

Permanent staff (full-time equivalent): 1063 PhD Students: 732

Partnership incomes with industry: €13,7M Global budget: €127,8M

#### Contact

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