Laboratoire Informatique, Image et Interaction (L3i)

L3i is the computer science research laboratory of La Rochelle Université. It brings together researchers in computer science of the whole institution including those from the Institute of Technology.

Focusing on the issue of interactive and intelligent management of digital content, the work of its members focuses on the national and European socio-economic issues related to this very promising field of research.

**Disciplines**
- Computer Science
- Computer engineering
- Automation
- Signal processing

**Societal challenges**

- **Dematerialization**
  Research on digitization and valorization of digital contents.

- **Digital content**
  The L3i addresses the study of the analysis and the exploitability of digital content, notably in a multimodal context.

- **Human-machines interactions**
  Research on the analysis of traces left by humans and the self-adaptation of computer systems in consequence.

- **Interdisciplinarity**
  Integration of legal, managerial, economic and usage issues into its research, carrying out interdisciplinary work with CEJLR (Law), CEREGE (Management, Marketing), and CRHIA (International History and Atlantic) in order to understand the use of digital content according to a systemic vision, and to address current social issues: digital economy, change management, digital trust.

- **Environmental excellence**
  Development of application-oriented research activities in the field of environmental excellence and sustainable development. The laboratory is more specifically interested in topics such as monitoring animal trajectories, coastal environments monitoring or energy efficiency in buildings.
Research Network

L3i is integrated into regional clusters (including the CNRS MIRES Federation), national networks (I3, ISIS and RSD research groups) and international networks (including IAPR and IEEE) around strategic themes related to intelligent and interactive content management.

The laboratory is at the origin of the Valconum international consortium. Dedicated to promoting research in the digital sciences field, VALCONUM brings together laboratories, companies and local authorities.

The Laboratory is also a member of the Big Data Alliance launched in 2013 to promote the development, in France, of new services and projects in this field.

Expertise Achievements

The L3i has developed in collaboration with the Marin protected area of the Gironde estuary and the Pertuis Sea some tools to count boats and evaluate the practices of boaters to better protect fragile marine areas.

The L3i contributed to the development of the service "Mobile connect et moi" of France-Connect to access public service websites by developing processes based on face recognition.

The use of Artificial Intelligence coupled with semantic analysis has helped to develop the FairGuest tool that analyzes the opinions of tourists posted on social networks to inform tourism professionals.

It also regularly participates in research projects supported by the National Agency for Research, the European program H2020, etc.

Training

MASTER IN INFORMATION TECHNOLOGY "ICONE"

- programme Software Architect
- programme Data

Partnerships Collaborations

The Laboratory benefits from the active support of local authorities (including the General Council of Charente-Maritime, the Community of Agglomeration of La Rochelle and the Nouvelle-Aquitaine Region). Its work is conducted in partnership with a dozen national research centers (including INRIA). The L3i also has privileged links with numerous research centers around the world (including the Computer Vision Center of the Autonomous University of Barcelona, Federal University of Rio de Janeiro, the Intelligent Media Processing Group of Osaka Prefecture University, or the Indian Institute of Technology Khargpur).

It is also involved in more than twenty industrial partnerships throughout France (such as Renault, Orange, Nokia, SysTel, Docapost, Itesoft, Proxem, Actualuna).

CONTACT

Laboratoire Informatique, Image, Interaction

- Avenue Michel Crépeau - 17042 La Rochelle cedex 01
- +33 (0)5 46 45 82 62
- l3i-direction@univ-lr.fr
- l3i.univ-larochelle.fr

univ-larochelle.fr