

 **Grup de Recerca en Interacció
Persona Ordinador i Integració de Dades**
fundat pel Dr. Jesús Lorés

*La parte más importante de la tecnología
son las personas que la utilizan*

<http://www.griho.udl.cat>

Human-Computer Interaction & Data Integration research group



 de les Illes Balears

EPE - Escola Politècnica Superior C. Jaume II, 59 campus caparró 25007 Lleida
Aada 2.01 - tel. 6 972 79 27 20 - info@griho.net
©2012 GRIHO. Todos los derechos reservados








 UNIVERSITAT ROVIRA I VIRGILI

 Escuela Universitaria
Politécnica de Madrid

 UNIVERSITAT DE BARCELONA

GRIHO presentation (May, 2013)



2




Presentation

HCI and Data integration Research Group

Computer Science and Industrial Engineering
Department
Universitat de Lleida

Member of  & 

GRIHO presentation (May, 2013) 3



Foundation

1991 (22y ago) by PhD. Jesus Lorés†

GRIHO presentation (May, 2013) 4




GOALS

teach, research & technology transfer

related with Human-Computer Interaction (HCI) field.

GRIHO presentation (May, 2013) 5




TEAM

- 6** PhD
- 1** teacher
- 3** PhD students
- 1** fellow
- 2** invited PhD students

- Roberto García
- Rosa M^a Gil
- Marta Oliva
- Montse Sendin
- Francisco Jurado
- Toni Granollers
- Juan M. Gimeno
- Llúcia Masip
- Josep M. Brunetti
- Afra Pascual
- David Castellà
- Yenny Méndez
- Andrés Solano

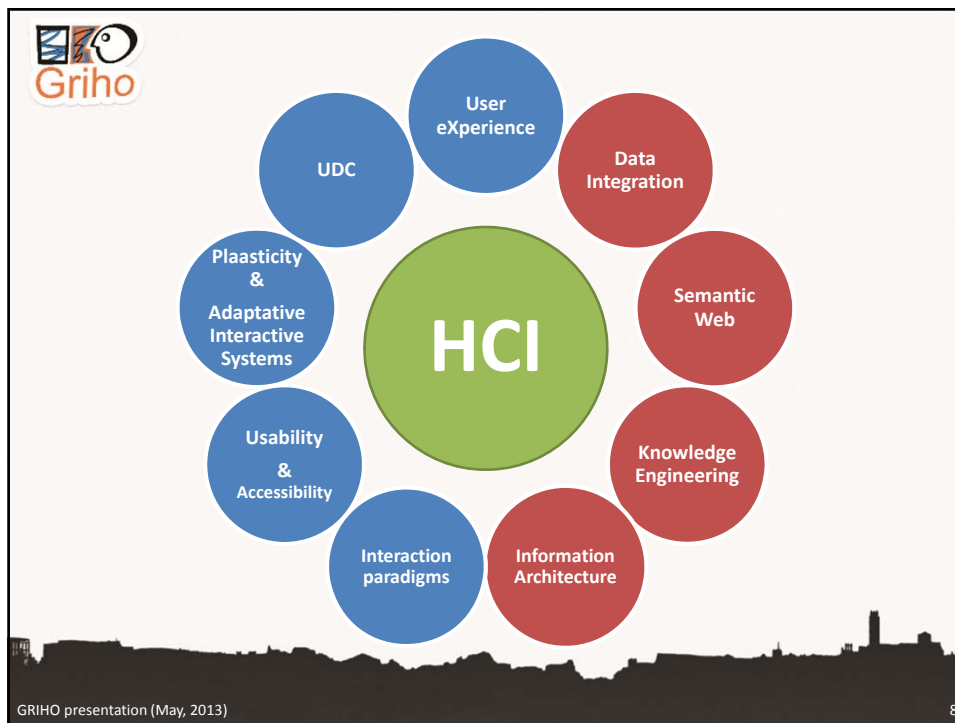
GRIHO presentation (May, 2013) 6



VISION

The most important part of technology are the **people** using it

GRIHO presentation (May, 2013) 7



User eXperience

Open-HEREDEUX: Open HEuristic REsource for Designing and Evaluating User eXperience

Open-HEREDEUX

Open Repository Adviser Scorer Results Analyzer Video Tutorials

Open-HEREDEUX

OPEN-HEREDEUX is the short name that we use to refer to the project called: "OPEN HEuristic Resource for Designing and Evaluating User eXperience in interactive systems". It will enable UX experts to design and evaluate UX in a semi-automated way.

OPEN-HEREDEUX is divided into four components:

- **The Open Repository of heuristics:** The main goal of this component is to manage information. We should provide the Repository with all the needed information to achieve the complete and minimum set of heuristics for a specific interactive system, and it also considers all UX aspects of a design phase or evaluation process for a specific interactive system.
- **The Adviser of heuristics:** The main aim of the Adviser of heuristics is to propose the most convenient list of heuristics to be used (for the specific system to be analyzed), such as recommendation principles in a design phase or such as evaluation principles in a UX evaluation based on heuristics.
- **The Scorer of heuristics:** If we want to use the adviser's set of heuristics to evaluate the UX, we can carry out the evaluation using the Scorer. It helps UX evaluators in their process of scoring the list of heuristics.
- **The Results Analyzer:** This component waits for the extraction of quantitative and qualitative results.

© 2012 Universitat de Lleida - Pl. de Victor Balaguer, 1, E-25003 Lleida - Tel. +34 973 702 000 All rights reserved

GRIHO presentation (May, 2013)

9

Semantic Web

- 2 PhD in course
- Projects
 - ✓ **OMediaDis**
 - **MediaMixer**, Community and networking for the reMIXing of online MEDIA
 - **InDAGuS** (Infrastructures for Sustainable Open Government Data with Geospatial Features)
- Collaborations
 - Food and Agriculture Organization of the United Nations (**UN-FAO**)

Semantic Web for Business: Cases and Applications
García, R. (editor)
IGI Global, 2008
ISBN 978-1-60566-066-0
[Table of Contents](#)
[Preface](#)
[Brochure](#)

SEMANTIC WEB FOR BUSINESS
CASES AND APPLICATIONS


A Semantic Web Approach to Digital Rights Management
García, R.
VDM Verlag Dr. Müller, 2010
ISBN 978-3-639-15740-6

Tech & Knowledge Transfer


- To make Open Data in the Web usable.
- Users facing a dataset can easily grasp what kind of entities are in there, how they are interrelated, what are their main properties and values, ...







GRIHO presentation (May, 2013)

10



Current PROJECTS



MediaMixer

Community and networking for the reMIXing of online MEDIA


Goal: the adoption of semantic multimedia technology in their systems and workflows to build a European market for media fragment re-purposing and re-selling

- Collect and analyse the requirements of the industry
- Collect and analyse use cases
- Produce and highlight materials
- Creation of appropriate APIs, software, tools and services
- Provision of software and service documentation and training
- Online demonstrators
- One-to-one and group meetings
- A MediaMixer online portal <http://community.mediamixer.eu>



<http://mediamixer.eu>

GRIHO presentation (May, 2013)

11



Current PROJECTS

InDAGuS

Infrastructures for Sustainable Open Government Data with Geospatial Features

Goal: develop and test infrastructures that facilitate collecting, preparing, managing, publishing and interacting with open data, specially data with geospatial features


InDAGuS-UX

Subproject related with User Experience issues

- Research and develop user interfaces for Open/Linked Data Exploration and Visualization
- Improve the User Experience of lay users when interacting with Open/Linked Data
 - Usability, Accessibility,...


GRIHO presentation (May, 2013)


12

 <http://www.udl.cat/serveis/seu/Udlxtothom/recursos/guies.html>

Accessibility

- ✓ **Guidelines for creating accessible digital content**
 - Text editors, presentations, online editors, PDF
 - Video
- PhD **“Accessibility of interactive web environments: overcoming the digital divide”**
- Permanent collaborations
 - Associació Provincial de Paralisi Cerebral de Tarragona (**APPC**)
 - Associació Rehabilitació del Minusvàlid (**AREMI**)





<http://www.once.es/serviciosSociales/index.cfm?navega=detalle&idobjeto=157&idtipo=1>

GRIHO presentation (May, 2013) 13

 **Projects**  Agència de Gestió d'Ajuts Universitaris i de Recerca

 activa mutua 2008

Video without barriers to support teaching in higher education

Goal:

- To provide **tools** and **examples** that teachers can make digital videos accessible, considering the presentation and audio description and/or subtitling.





<http://www.videoaccessible.udl.cat>

GRIHO presentation (May, 2013) 14

Griho

Tech Transfer & collaboration with other groups/centres

- **FORESTFOC**: Servei Digital de Predicció d'Incendis Forestals
- **Projecte Avanza** una **xarxa social** per a recuperar la memòria històrica dels municipis
 - Mercolleida
 - SEGRE
 - Activa Mutua
- **OBSERVATORI PORCÍ** (DARP)
- Projecte **VALOR 2010** (*Diagnòstic Molecular Dietari*)
- Avaluació als **Telecentres** de Lleida, Paeria

Research

Tech & Knowledge Transfer

Teaching

MASTER en Interacció Persona-Ordinador

GRIHO presentation (May, 2013) 15

Griho

Projects 2012

nutren + **Griho**
nutrigenomics

Molecular Diagnosis Expert System Diary. Prototype & user test

Proveïdors (SERVEIS ANALÍTICS)

Consumidors

Consumidors

Usuaris (PROFESSIONALS)

DADES MOLECULARS
Perfil metabolòmic
Perfil lipídomic
Perfil genètic

DADES NUTRICIONALS
Antropometria
Exercici Físic
Dieta prèvia

HISTÒRIA CLÍNICA
Dades prèvies, historial

Diagnòstic Molecular Dietari

DIETA PERSONALITZADA


Seguiment i control

WP2. Definició de Requeriments
→ Documents anàlisi de requisits:
Estat del art, objectius, usuaris, escenaris, funcions, tasques, esbossos


WP3. Disseny i implementació del prototip
→ Disseny del sistema i interfícies
→ Implementació del prototip (Actual)

WP4. Pilotatge
→ Realització de la prova a finals de febrer


GRIHO presentation (May, 2013) 16




Collaborations




- In company training
- Collaboration testing Open-HEREDEUX tool.
 - Real experimental part of the PhD
- Interested in Semantic Web Technology
- CeBIT (Hanover, Germany)
 - one of the most significant technology fairs


GRIHO presentation (May, 2013) 17



U-CSCL project



Iberoamerican Network to support teaching and learning of skills through **collaborative and ubiquitous environments**



- **12** groups
- **80** researchers/teachers
- **4** years
- Leader: PhD Cesar.A.Collazos (U. del Cauca, Colombia)



GRIHO presentation (May, 2013) 18

 **Master in HCI**


- From 2007 to 2012
- Official Bologna Master at Universitat de Lleida (Spain)
- Participation of university teachers from AIPO (collaboration between universities)
- Curricular structure and minimal contents. Consensus between AIPO's university teachers and representative professionals related to HCI




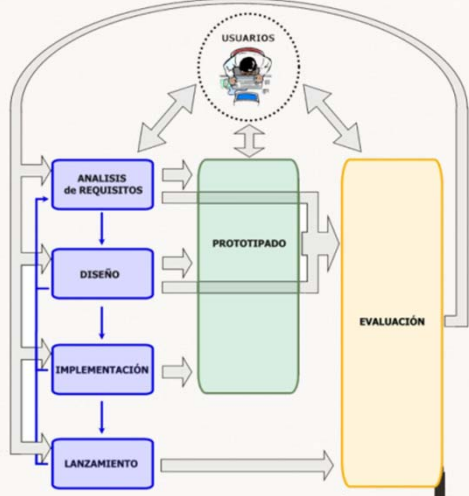

http://www.udl.cat/estudis/masters_eng/HCI.html

- Semi-distance teaching modality
- Project-Based Learning methodology
- Interuniversity, Interdisciplinary & companies participation

GRIHO presentation (May, 2013) 19

 **User Centered Design methodology**
MPlu+a





The diagram illustrates the User Centered Design methodology (MPlu+a) as a continuous cycle. It starts with 'USUARIOS' (Users) at the top, represented by a person icon. Below this, four sequential stages are shown in blue boxes: 'ANÁLISIS de REQUISITOS' (Requirements Analysis), 'DISEÑO' (Design), 'IMPLEMENTACIÓN' (Implementation), and 'LANZAMIENTO' (Launch). These stages lead to a 'PROTOTIPADO' (Prototyping) stage in a green box, which then feeds into an 'EVALUACIÓN' (Evaluation) stage in a yellow box. Arrows indicate a feedback loop from 'EVALUACIÓN' back to 'USUARIOS' and from 'EVALUACIÓN' back to the 'ANÁLISIS de REQUISITOS' stage. Additionally, bidirectional arrows connect 'USUARIOS' to 'ANÁLISIS de REQUISITOS' and 'DISEÑO', and 'USUARIOS' to 'IMPLEMENTACIÓN'.

GRIHO presentation (May, 2013) 20



Semantic Web portal Rhizomik



The screenshot shows the Rhizomik website interface. On the left, there is a list of publications with details such as date, description, and links. On the right, the 'About Rhizomik' section explains the initiative's goals and lists several projects: R2OLAP, R2OLAP+, COPIRIGHT, BUSINESS, SEMANTIC, and LINKING. At the bottom of the screenshot, a blue box contains the URL <http://rhizomik.net>.

GRIHO presentation (May, 2013) 21



Books

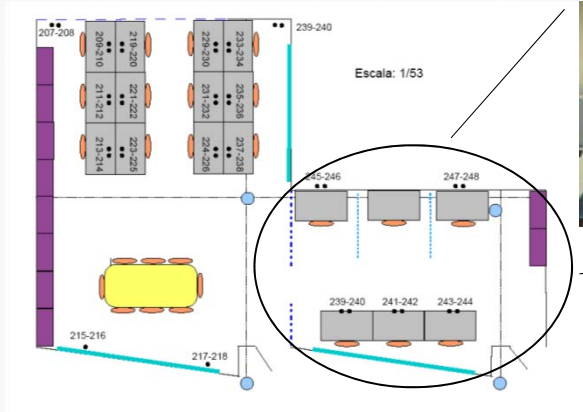
- **New Trends on Human-Computer Interaction. Research, Development, New Tools and Methods**
 - Macías, José A.; Granollers, Toni; Latorre, Pedro (Eds.)
 - Springer, 2009
 - ISBN: 978-1-84882-351-8
- **Semantic Web for Business: Cases and Applications**
 - García, R. (editor)
 - IGI Global, 2008
 - ISBN 978-1-60566-066-0




GRIHO presentation (May, 2013) 22



Usability Lab



GRIHO presentation (May, 2013)

23