



luis montesano

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**luis montesano**

Surname(s): **montesano**
Name: **luis**
DNI:
Date of birth:
Land line phone: **montesano@unizar.es**
Email:

Current professional situation

- 1** **Employing entity:** Universidad de Zaragoza **Type of entity:** University
Department: Departamento informática e Ing. de Sistemas
Professional category: Profesor Catedrático
Start date: 22/03/2022
Type of contract: Civil servant
- 2** **Employing entity:** Bitbrain Technologies SL **Type of entity:** Business
Professional category: Director Científico
Start date: 01/07/2016
Type of contract: Permanent employment contract



Teaching experience

Experience supervising doctoral thesis and/or final year projects

- 1** **Project title:** Segmentación semántica para aplicación en el mundo real.
Co-director of thesis: Montesano; Murillo
Entity: Universidad de Zaragoza **Type of entity:** University
Student: Iñigo Alonso Ruiz
Obtained qualification: cum laude
Date of reading: 14/07/2021
European doctorate: Yes
Quality recognition: Yes
- 2** **Project title:** Deep Learning for 3D Visual Perception
Co-director of thesis: montesano; Civera
Entity: Universidad de Zaragoza **Type of entity:** University
Student: José María Facil Ledesma
Obtained qualification: Cum Laude
Date of reading: 15/01/2021
European doctorate: Yes
Quality recognition: Yes
- 3** **Project title:** Asynchronous detection of time-unlocked error potentials
Entity: Universidad de Zaragoza **Type of entity:** University
Student: Jason Omedes
Date of reading: 05/01/2017
- 4** **Project title:** Statistical analysis and planning of brain decoding studies: Insights from developing an attentional brain-computer interface
Type of project: Doctoral thesis
Co-director of thesis: Mínguez Zafra, Javier
Entity: Universidad de Zaragoza **Type of entity:** University
Student: Filip Melinscak
Obtained qualification: Sobresaliente cum laude
Date of reading: 18/11/2016
- 5** **Project title:** Aprendizaje de estructuras 3D a partir de secuencias de imágenes
Type of project: Proyecto Final de Máster
Co-director of thesis: Civera Sancho, Javier
Entity: Universidad de Zaragoza **Type of entity:** University
Student: José María Fácil Ledesma
Obtained qualification: Matricula de honor
Date of reading: 06/10/2016
- 6** **Project title:** Characterizing and decoding attention during motor tasks with EEG
Co-director of thesis: Javier Minguez
Entity: Universidad de Zaragoza **Type of entity:** University



Student: Filip Mensiak

Date of reading: 05/09/2016

Quality recognition: Yes

7 Project title: EEG based brain-computer interfaces for detection of gait intention in healthy and stroke subjects.

Type of project: Doctoral thesis

Co-director of thesis: Mínguez Zafra, Javier

Entity: Universidad de Zaragoza

Type of entity: University

Student: Andreea Ioana Sburlea

Obtained qualification: Sobresaliente cum laude

Date of reading: 05/02/2016

8 Project title: Brain-machine interfaces for motor rehabilitation and restoration after spinal cord injury

Type of project: Doctoral thesis

Co-director of thesis: Mínguez Zafra, Javier

Entity: Universidad de Zaragoza

Type of entity: University

Student: Eduardo López Larraz

Obtained qualification: Sobresaliente cum laude

Date of reading: 29/10/2015

9 Project title: Optimización Bayesiana aplicada a la simulación de fluidos

Type of project: Proyecto Final de Grado

Co-director of thesis: Martínez Cantín, Rubén

Entity: Ministerio de Educación y Cultura

Type of entity: University

Student: Javier García Barcos

Obtained qualification: Notable

Date of reading: 06/10/2015

10 Project title: Reconstrucción 3D a partir de una imagen

Type of project: Proyecto Final de Grado

Co-director of thesis: Civera Sancho, Javier

Entity: Universidad de Zaragoza

Type of entity: University

Student: Jesús Oliva Maza

Obtained qualification: Matricula de honor

Date of reading: 17/09/2015

11 Project title: Generación automática de horarios para escuelas. Escalabilidad de las Redes Neuronales de Hopfield

Type of project: Proyecto Final de Grado

Entity: Universidad de Zaragoza

Type of entity: University

Student: Diego Martínez Marrodán

Obtained qualification: Notable

Date of reading: 08/09/2015

12 Project title: Integración de hardware de medición de actividad fisiológica y desarrollo software front-end y back-end de aplicaciones de neuromarketing

Type of project: Proyecto Final de Grado

Co-director of thesis: Mínguez Zafra, Javier

Entity: Universidad de Zaragoza

Type of entity: University

Student: Daniel Martín Calvo

Obtained qualification: Notable



Date of reading: 09/07/2015

- 13** **Project title:** Caracterización de un sistema de medición de electroencefalograma basado en sensores secos mediante la evaluación de protocolos neurofisiológicos
Type of project: End of course project
Entity: Universidad de Zaragoza **Type of entity:** University
Student: Pablo Buil Tercero
Obtained qualification: Notable
Date of reading: 01/07/2015
- 14** **Project title:** Análisis de la activación emocional mediante biosensores y construcción de una base normativa de estímulos para su decodificación
Type of project: End of course project
Entity: Universidad de Zaragoza **Type of entity:** University
Student: Miguel Angel Castan Lascorz
Obtained qualification: Notable
Date of reading: 11/05/2015
- 15** **Project title:** Desarrollo de un sistema de detección de espurios a partir del hardware del Anillo de USENNS
Type of project: End of course project
Entity: Universidad de Zaragoza **Type of entity:** University
Student: Daniel Estepa Sanz
Obtained qualification: Matricula de honor
Date of reading: 16/03/2015
- 16** **Project title:** Seguimiento y relocalización de una cámara monocular en mapas densos tridimensionales
Type of project: Proyecto Final de Grado
Co-director of thesis: Civera Sancho, Javier
Entity: Universidad de Zaragoza **Type of entity:** University
Student: José María Fácil Ledesma
Obtained qualification: Matricula de honor
Date of reading: 25/02/2015
- 17** **Project title:** Decoding motor EEG correlates for rehabilitation of upper limb
Co-director of thesis: Javier Minguez
Entity: Universidad de Zaragoza **Type of entity:** University
Student: Eduardo Lopez
Date of reading: 05/01/2015
- 18** **Project title:** Integración de tecnologías de medida de actividad fisiológica y de EEG en los productos Neurolab, usenns y BrainUp
Type of project: Proyecto Final de Grado
Co-director of thesis: Minguez Zafra, Javier
Entity: Universidad de Zaragoza **Type of entity:** University
Student: Adrián Sánchez Recuero
Obtained qualification: Notable
Date of reading: 15/12/2014
- 19** **Project title:** Inverse reinforcement learning in continuous state spaces with multiple rewards
Type of project: Proyecto Final de Máster
Entity: Universidad de Zaragoza **Type of entity:** University



Student: Javier Almingol Docando
Obtained qualification: Matricula de honor
Date of reading: 15/12/2014

20 **Project title:** Técnicas de segmentación y "tracking" aplicadas a vídeo vigilancia
Type of project: End of course project
Co-director of thesis: Murillo Arnal, Ana Cristina
Entity: Universidad de Zaragoza **Type of entity:** University
Student: Alicia Sanjuan Jiménez
Obtained qualification: Matricula de honor
Date of reading: 23/09/2014

21 **Project title:** Desarrollo de una aplicación para la gestión y monitorización de una red Prime para comunicaciones por la red eléctrica
Type of project: End of course project
Entity: Universidad de Zaragoza **Type of entity:** University
Student: Daniel Cano Perez
Obtained qualification: Notable
Date of reading: 10/07/2014

22 **Project title:** Sistema de reconocimiento de gestos faciales emocionales a través del tratamiento de señal encefalográfica
Type of project: Proyecto Final de Grado
Co-director of thesis: Eduardo Horna Prat
Entity: Ministerio de Educación y Cultura **Type of entity:** University
Student: Eva Fernández Marín
Obtained qualification: Notable
Date of reading: 07/07/2014

23 **Project title:** Reconocimiento de acciones egocéntricas desde una cámara RGB-D montada en un casco.
Type of project: End of course project
Co-director of thesis: Murillo Arnal, Ana Cristina
Entity: Universidad de Zaragoza **Type of entity:** University
Student: Pablo Azagra Millán
Obtained qualification: Notable
Date of reading: 14/05/2014

24 **Project title:** Robot Learning and Control Using Error-Related Cognitive Brain Signals
Type of project: Doctoral thesis
Co-director of thesis: Mínguez Zafra, Javier
Entity: Universidad de Zaragoza **Type of entity:** University
Student: Iñaki Asier Iturrate Gil
Obtained qualification: Sobresaliente cum laude
Date of reading: 04/02/2014

25 **Project title:** Robot Learning and Control Using Error-Related Cognitive Brain Signals
Co-director of thesis: Javier Minguez
Entity: Universidad de Zaragoza **Type of entity:** University
Student: Iñaki Iturrate
Obtained qualification: Sobresaliente Cum Laude
Date of reading: 03/02/2014



European doctorate: Yes

Quality recognition: Yes

- 26** **Project title:** Diseño de un sistema de medida del EEG integral de carácter investigador.
Type of project: Proyecto Final de Máster
Co-director of thesis: Mínguez Zafra, Javier
Entity: Universidad de Zaragoza **Type of entity:** University
Student: Aitor Ortiz Coso
Obtained qualification: Sobresaliente
Date of reading: 10/12/2013
- 27** **Project title:** Diseño, desarrollo e implantación de un sistema software para la adquisición, registro y monitorización de bioseñales y dispositivos biométricos
Type of project: Proyecto Final de Máster
Entity: Universidad de Zaragoza **Type of entity:** University
Student: Juan Gómez Cadena
Obtained qualification: Sobresaliente
Date of reading: 01/10/2013
- 28** **Project title:** Estudio de características frecuenciales de los potenciales de error para el control en continuo mediante interfaces cerebro-máquina.
Type of project: Proyecto Final de Máster
Entity: Universidad de Zaragoza **Type of entity:** University
Student: Jason Omedes Llorente
Obtained qualification: Matricula de honor
Date of reading: 01/10/2013
- 29** **Project title:** Decodificación de información motora de la actividad electroencefalográfica no invasiva para interfaces cerebro-máquina.
Type of project: Doctoral thesis
Co-director of thesis: Mínguez Zafra, Javier
Entity: Universidad de Zaragoza **Type of entity:** University
Student: Javier Mauricio Antelis Ortiz
Obtained qualification: Apto cum laude
Date of reading: 24/06/2013
- 30** **Project title:** Decodificación de la información motora de la actividad electroencefalográfica no invasiva para interfaces cerebro-maquina
Co-director of thesis: Javier Minguez
Entity: Univesidad de Zaragoza
Student: Mauricio Antelis
Obtained qualification: Sobresaliente Cum Laude
Date of reading: 24/06/2013
Quality recognition: Yes
- 31** **Project title:** Agrupamiento no paramétrico en espacios latentes con selección automática de características relevantes
Type of project: End of course project
Entity: Universidad de Zaragoza **Type of entity:** University
Student: Javier Almingol Docando
Obtained qualification: Matricula de honor



Date of reading: 13/12/2012

32 Project title: Evaluación de técnicas de clasificación para detección de movimiento a partir de EEG

Type of project: End of course project

Entity: Universidad de Zaragoza

Type of entity: University

Student: Roldan Galan Lafarga

Obtained qualification: Notable

Date of reading: 11/12/2012

33 Project title: Sensor guiado por robot para determinar regiones tumorales en la superficie cerebral: optimización de puntos de contacto

Type of project: End of course project

Entity: Universidad de Zaragoza

Type of entity: University

Student: Pablo Javier Quílez Velilla

Obtained qualification: Notable

Date of reading: 21/09/2012

34 Project title: Análisis del descriptor SIFT para el reconocimiento de objetos en imágenes

Type of project: End of course project

Co-director of thesis: Civera Sancho, Javier

Entity: Universidad de Zaragoza

Type of entity: University

Student: Enrique Nasarre Puy

Obtained qualification: Aprobado

Date of reading: 19/12/2011

35 Project title: Clasificación de los estados de reposo, preparación y ejecución del movimiento del brazo a través del electroencefalograma

Type of project: End of course project

Co-director of thesis: Minguez Zafra, Javier

Entity: Universidad de Zaragoza

Type of entity: University

Student: Miguel Rodrigo Gomez

Obtained qualification: Sobresaliente

Date of reading: 29/09/2011

36 Project title: Tratamiento de imágenes 3D para el cálculo de volúmenes

Type of project: End of course project

Co-director of thesis: Matthew Thurley

Entity: Ministerio de Educación y Cultura

Type of entity: University

Student: Fernando Indurain Gaspar

Obtained qualification: Aprobado

Date of reading: 22/09/2011

37 Project title: Decodificación de los objetivos finales (3D) del movimiento del brazo en tareas de alcance a partir de potenciales de movimiento anticipatorio para EEG brain

Type of project: End of course project

Co-director of thesis: Minguez Zafra, Javier

Entity: Universidad de Zaragoza

Type of entity: University

Student: Eduardo Horna Prat

Obtained qualification: Sobresaliente

Date of reading: 19/09/2011



- 38** **Project title:** Reconstrucción 3D densa basada en planos a partir de una secuencia de video
Type of project: End of course project
Co-director of thesis: Civera Sancho, Javier
Entity: Universidad de Zaragoza
Student: Guillermo Navarro Pardo
Obtained qualification: Sobresaliente
Date of reading: 05/07/2011
Type of entity: University
- 39** **Project title:** Desarrollo de una interfaz gráfica cerebro-computador para el movimiento de una prótesis robótica con actividad mental
Type of project: End of course project
Co-director of thesis: Minguez Zafra, Javier
Entity: Universidad de Zaragoza
Student: Raquel Noé Martínez
Obtained qualification: Notable
Date of reading: 14/03/2011
Type of entity: University
- 40** **Project title:** REDES DE CREENCIA PROFUNDA PARA EL RECONOCIMIENTO DE ERPS EN SEÑALES DE EEG
Type of project: End of course project
Entity: Universidad de Zaragoza
Student: David Perez Arbues
Obtained qualification: Sobresaliente
Date of reading: 28/09/2010
Type of entity: University
- 41** **Project title:** RECONOCIMIENTO Y REGISTRO 3D DE OBJETOS CONOCIDOS EN UNA ESCENA
Type of project: End of course project
Co-director of thesis: Civera Sancho, Javier
Entity: Universidad de Zaragoza
Student: Félix Valdivielso Miranda
Obtained qualification: Sobresaliente
Date of reading: 27/09/2010
Type of entity: University
- 42** **Project title:** SÍNTESIS DE VISITAS A PARTIR DE IMÁGENES E INFORMACIÓN 3D
Type of project: End of course project
Co-director of thesis: Civera Sancho, Javier
Entity: Universidad de Zaragoza
Student: Cesar Soriano Marin
Obtained qualification: Sobresaliente
Date of reading: 09/07/2010
Type of entity: University
- 43** **Project title:** RECONSTRUCCIÓN 3D DENSA DE ESCENAS DE INTERIOR A PARTIR DE IMÁGENES
Type of project: End of course project
Co-director of thesis: Civera Sancho, Javier
Entity: Universidad de Zaragoza
Student: Alberto Argilés Gil
Obtained qualification: Sobresaliente
Date of reading: 14/05/2010
Type of entity: University



44 **Project title:** ALGORITMOS DE SCAN MATCHING BASADOS EN METRICAS PARA ESTIMAR EL MOVIMIENTO DE ROBOTS QUE SE DESPLAZAN EN ESPACIOS TRIDIMENSIONALES

Type of project: End of course project

Co-director of thesis: Minguez Zafra, Javier

Entity: Universidad de Zaragoza

Type of entity: University

Student: Lydia Biota Duran

Obtained qualification: Notable

Date of reading: 12/07/2005

45 **Project title:** ANÁLISIS, DISEÑO Y DESARROLLO DE UNA APLICACIÓN DE VIDEOTELEFONÍA SOBRE UNA PLATAFORMA MULTIMEDIA.

Type of project: End of course project

Co-director of thesis: Zarazaga Soria, Francisco Javier

Entity: Universidad de Zaragoza

Type of entity: University

Student: J. Ignacio Calvo Callejo

Obtained qualification: Notable

Date of reading: 28/02/2003

Scientific and technological experience

Scientific or technological activities

R&D projects funded through competitive calls of public or private entities

1 **Name of the project:** Fluently - The essence of human-robot interactions

Entity where project took place: Bitbrain

City of entity: Zaragoza,

Name principal investigator (PI, Co-PI....): Matuszewski; Montesano

Nº of researchers: 20

Funding entity or bodies:

EU-Horizon Europe

Type of entity: EC

Start-End date: 01/04/2022 - 30/03/2025

2 **Name of the project:** MISIONES IA: AI4HealthyAging

Entity where project took place: Bitbrain

Name principal investigator (PI, Co-PI....): Minguez; Arjona

Nº of researchers: 8

Funding entity or bodies:

Ministerio de Ciencia e Innovación

Type of entity: Programa Misiones

Start-End date: 01/09/2021 - 31/07/2024

3 **Name of the project:** HBP Call for SMEs: Neuro Robin

Entity where project took place: Bitbrain

City of entity: Zaragoza,

Name principal investigator (PI, Co-PI....): Montesano

Nº of researchers: 3

Funding entity or bodies:



EU

Type of entity: EU Flagship

Start-End date: 01/06/2021 - 30/09/2023

4 Name of the project: SISTEMAS DE EEG MODULARES Y REUTILIZABLES**Entity where project took place:** BITBRAIN**Name principal investigator (PI, Co-PI....):** 1**Nº of researchers:** 4**Start-End date:** 03/01/2022 - 30/06/2023**5 Name of the project:** HYPNOS**Entity where project took place:** Bitbrain

Type of entity: Business

City of entity: zaragoza,**Name principal investigator (PI, Co-PI....):** Lopez**Nº of researchers:** 4**Start-End date:** 01/06/2021 - 31/05/2023**6 Name of the project:** Servicios cloud de decodificación de actividad cerebral basados en redes profundas**Entity where project took place:** Bitbrain**City of entity:** Zaragoza,**Name principal investigator (PI, Co-PI....):** Montesano**Nº of researchers:** 4**Start-End date:** 01/10/2020 - 30/12/2022**7 Name of the project:** ANALISIS MULTIMODAL DE ESCENAS PARA APLICACIONES DE MONITORIZACION**Entity where project took place:** Universidad de Zaragoza

Type of entity: University

Name principal investigator (PI, Co-PI....): Murillo**Nº of researchers:** 5**Start-End date:** 01/01/2019 - 31/12/2021**8 Name of the project:** Flex cap (Grant Agreement 761496)**Entity where project took place:** Bitbrain**Name principal investigator (PI, Co-PI....):** Luis Montesano**Nº of researchers:** 3**Start-End date:** 15/03/2019 - 01/06/2020**9 Name of the project:** VR-Biomarkers (GA#731391, Sub-Grant Agreement No: 2019/A03-9)**Entity where project took place:** Bitbrain**Nº of researchers:** 3**Funding entity or bodies:**

Comisión Europea H2020

Type of entity: EU

Start-End date: 02/05/2019 - 31/05/2020**10 Name of the project:** FILOVI**Entity where project took place:** Bitbrain-UZ**Name principal investigator (PI, Co-PI....):** montesano**Nº of researchers:** 7**Funding entity or bodies:**

Ministerio de Ciencia e Innovación

Type of entity: Retos-colaboración



Start-End date: 02/04/2018 - 30/03/2020

11 Name of the project: Paquetización, Automatización y Evaluación Comparativa de Estudios de Neuromarketing

Entity where project took place: Universidad de Zaragoza **Type of entity:** University

City of entity: Zaragoza, Aragon, Spain

Nº of researchers: 3

Funding entity or bodies:

Ministerio de Ciencia e Innovación. Investigación **Type of entity:** Ministerio

City funding entity: Madrid, Community of Madrid, Spain

Start-End date: 01/06/2015 - 28/09/2018

12 Name of the project: MOREGRASP

Entity where project took place: BITRAIN **Type of entity:** Business

City of entity: ZARAGOZA, Aragon, Spain

Name principal investigator (PI, Co-PI....): GERNOT MULLER PUTZ

Nº of researchers: 18

Funding entity or bodies:

H2020

Type of entity: State agency

City funding entity: BRUSELAS

Start-End date: 02/03/2015 - 28/02/2018

13 Name of the project: Manolo: Cloud-Edge Efficient & Trustworthy AI

Geographical area: geográfico: Unión Europea

Entity where project took place: Bitbrain

Start date: 01/02/2024

Total amount: 8.605.772 €

14 Name of the project: BAYesian Inference with FLEXible electronics for biomedical Applications

Geographical area: geográfico: Unión Europea

Entity where project took place: Bitbrain

Start date: 01/02/2023

Total amount: 3.204.941 €

15 Name of the project: Neuro Robin

Geographical area: geográfico: Unión Europea

Entity where project took place: bitbrain

Start date: 01/02/2022

Total amount: 280.000 €

16 Name of the project: MITICS - Mixed Ionic and electronic Transport In Conjugated polymers for bioelectronicS

Entity where project took place: Bitbrain

Start date: 01/02/2021

Total amount: 3.184.036 €

17 Name of the project: Mixed Ionic and electronic Transport In Conjugated polymers for bioelectronicS.

Entity where project took place: Bitbrain

Name principal investigator (PI, Co-PI....): Bitbrain: Javier Minguez



Nº of researchers: 3

Funding entity or bodies:

EU/H2020

Type of entity: 964677 H2020-FETOPEN-2018-2020

Start date: 01/01/2021

Duration: 2 years - 11 months - 30 days

- 18 Name of the project:** INCIT-EV: Large demonstratioN user Centric urban and long-range charging solutions to boost an engaging deployment of Electric Vehicles in Europe

Geographical area: geográfico: Unión Europea

Entity where project took place: Bitbrain Nombres

Name principal investigator (PI, Co-PI....): (IP, Co-IP,...): (consorcio) Xavier Serrier; (bitbrain) Luis Montesano

Start date: 01/08/2020

Total amount: 350.000 €

- 19 Name of the project:** INCIT-EV.

Entity where project took place: Bitbrain

Name principal investigator (PI, Co-PI....): Xavier Serrier, IP Bitbrain: Luis Montesano

Funding entity or bodies:

EU/H2020

Start date: 01/01/2020

Duration: 3 years - 11 months - 30 days

- 20 Name of the project:** SublimaHomeRehab.

Entity where project took place: Bitbrain

Name principal investigator (PI, Co-PI....): Luis Montesano Investigador responsable Bitbrain: Luis Montesano

Funding entity or bodies:

Eurostars

Start date: 01/06/2019

Duration: 2 years - 6 months

- 21 Name of the project:** Neurotecnología Móvil para Investigación de Mercados InSitu

Entity where project took place: Bitbrain

Name principal investigator (PI, Co-PI....): Luis Montesano del Campo (UZ); María López (BitBrain)

Funding entity or bodies:

IPT-2012-1309-430000

Start date: 01/10/2012

Duration: 2 years - 2 months - 30 days

- 22 Name of the project:** NETT (ITN)

Entity where project took place: Bitbrain

Name principal investigator (PI, Co-PI....): Stephen Combes, Investigador responsable Bitbrain: Luis Montesano

Funding entity or bodies:

EU/FP7

Start date: 01/09/2012

Duration: 3 years - 11 months - 29 days

- 23 Name of the project:** APRENDIZAJE DE AFFORDANCES PARA EL CONTROL DE ROBOTS POR INTENCIONES.

Name principal investigator (PI, Co-PI....): Luis Montesano del Campo

Funding entity or bodies:

DPI2011-25892

**Start date:** 01/01/2012**Duration:** 2 years - 11 months - 30 days

- 24 Name of the project:** Flexible Skill Acquisition and Intuitive Robot Tasking for Mobile Manipulation in the Real World

Name principal investigator (PI, Co-PI....): Wolfram Burgard**Funding entity or bodies:**

Proyecto europeo. EU-FP7

Start date: 03/2010**Duration:** 3 years - 10 months

- 25 Name of the project:** Hybrid Neuroprosthetic and Neurorobotic Devices for Functional Compensation and Rehabilitation of Motor Disorders

Name principal investigator (PI, Co-PI....): José Luis Pons**Funding entity or bodies:**

CONSOLIDER-INGENIO 2010

MCT

Start date: 2010**Duration:** 5 years

- 26 Name of the project:** MMCACC: Modern Monte Carlo Algorithms for Computational Control

Name principal investigator (PI, Co-PI....): Luis Montesano del Campo**Funding entity or bodies:**

Fundação para a Ciencia e a Tecnologia (Programa Nacional Português) FCT - PTDC/EEA-ACR/70174/2006

Start date: 01/10/2007**Duration:** 2 years - 11 months - 29 days

- 27 Name of the project:** URUS: Ubiquitous Networking Robotics in Urban Settings

Name principal investigator (PI, Co-PI....): Alberto San Feliú**Funding entity or bodies:**

Proyecto europeo. IST-1-045062-URUS_STP

Start date: 2006**Duration:** 3 years

- 28 Name of the project:** Robótica, percepción y tiempo real, grupo de investigación consolidado

Name principal investigator (PI, Co-PI....): Luis Montano**Funding entity or bodies:**

Diputación General de Aragón

Start date: 01/01/2005**Duration:** 2 years - 11 months - 30 days

- 29 Name of the project:** CONTACT: Learning and Development of Contextual Action

Name principal investigator (PI, Co-PI....): José Santos-Victor**Funding entity or bodies:**

Proyecto europeo. EU-FP6-NEST-5010

Start date: 2005**Duration:** 4 years

- 30 Name of the project:** European robotics research network II (EURON II)

Name principal investigator (PI, Co-PI....): Henrik Christensen**Funding entity or bodies:**

Unión europea

Start date: 01/01/2004**Duration:** 3 years - 11 months - 30 days



- 31 Name of the project:** EXPRESS: Automatic exploration techniques for rescue applications
Name principal investigator (PI, Co-PI....): Luis Montano
Funding entity or bodies:
MCYT-DPI2003-7986
Start date: 2004 **Duration:** 2 years
- 32 Name of the project:** ROBOT-CUB: Robotic Open-architecture Technology for Cognition, Understanding and Behaviour
Name principal investigator (PI, Co-PI....): Giulio Sandini (UGDIST); Jose Santos-Victor (IST)
Funding entity or bodies:
Proyecto europeo. EU-FP6-IST-2004-004370
Start date: 2004 **Duration:** 5 years
- 33 Name of the project:** DAISY: Foundations of intelligent systems
Name principal investigator (PI, Co-PI....): Luc De Raedt
Funding entity or bodies:
Unión europea
Start date: 01/01/2003 **Duration:** 3 years - 10 months
- 34 Name of the project:** Perception and action control of complex robotic systems for human assistance in structured environments
Name principal investigator (PI, Co-PI....): Luis Montano
Funding entity or bodies:
HP2002-0037
MCYT
Portugal)
accion integrada universidad de Zaragoza- IST (Lisboa)
Start date: 01/01/2003 **Duration:** 2 years - 3 months
- 35 Name of the project:** Robótica, percepción y tiempo real, grupo de investigación consolidado
Name principal investigator (PI, Co-PI....): Luis Montano
Funding entity or bodies:
Diputación General de Aragón
Start date: 01/01/2003 **Duration:** 1 year - 11 months - 30 days
- 36 Name of the project:** Multi-Vehicle Exploration of Outdoor Unstructured Environments
Name principal investigator (PI, Co-PI....): Bo Whalberg
Funding entity or bodies:
Stint
Sweeden
Start date: 2003 **Duration:** 4 years
- 37 Name of the project:** European robotics research network (EURON)
Name principal investigator (PI, Co-PI....): Henrik Christensen
Funding entity or bodies:



Unión europea IST-2000-26048

Start date: 01/01/2002

Duration: 1 year - 11 months - 30 days

38 Name of the project: Red iberoamericana de robotica (RIBERO)

Name principal investigator (PI, Co-PI....): Rafael Aracil Santonja (UPM)

Funding entity or bodies:

CYTED-SUBPROGRAMA VII: Electrónica e informática aplicadas (redvii.1)

Start date: 01/07/2001

Duration: 3 years - 11 months - 29 days

39 Name of the project: Design and development of an electrical wheelchair with capability of assisted driving and autonomous navigation

Name principal investigator (PI, Co-PI....): Luis Montano

Funding entity or bodies:

MCYT-DPI2000-1272

Start date: 2001

Duration: 2 years

40 Name of the project: Programación Asistida de Robots para Tareas Industriales (PARTI)

Name principal investigator (PI, Co-PI....): Luis Basañez

Funding entity or bodies:

CYTED-Subprograma VII: Proyecto VII.20

Start date: 2001

Duration: 4 years

41 Name of the project: HASVIDEO Home Access System for Video based IP Tele-services

Name principal investigator (PI, Co-PI....): Miguel Angel Pérez

Funding entity or bodies:

Proyecto europeo UE IST -1999-10523

Start date: 2000

Duration: 2 years

Scientific and technological activities

Scientific production

Publications, scientific and technical documents

1 Alberto Sabater; Luis Montesano; Ana C Murillo. C.Event transformer+. A multi-purpose solution for efficient event data processing. IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE. 45 - 12, pp. 16013 - 16020. IEEE, 01/11/2023.

Type of production: Scientific paper

Format: Journal

2 Carlos Escolano; Eduardo Lopez-Larraz; Javier Minguez; Luis Montesano. Brain-Computer Interface-Based Neurorehabilitation: From the Lab to the Users' Home. BIOSYSTEMS & BIOROBOTICS. pp. 569 - 573. 01/06/2022.

Type of production: Scientific paper

Format: Journal



- 3** Alberto Sabater; Luis Montesano; Ana C Murillo. Event Transformer. A sparse-aware solution for efficient event data processing. IEEE COMPUTER SOCIETY CONFERENCE ON COMPUTER VISION AND PATTERN RECOGNITION WORKSHOPS. pp. 2676 - 2685. IEEE, 2022.
Type of production: Scientific paper **Format:** Journal
- 4** Iñigo Alonso; Luis Riazuelo; Luis Montesano; Ana C Murillo. Adaptation in LiDAR Semantic Segmentation by Aligning Class Distributions. PROCEEDINGS (INTERNATIONAL ASIA CONFERENCE ON INFORMATICS IN CONTROL, AUTOMATION, AND ROBOTICS). 18, pp. 330 - 337. IEEE, 2021.
Type of production: Scientific paper **Format:** Journal
- 5** Sabater, Alberto; Alonso, Inigo; Montesano, Luis; Murillo, Ana Cristina. Domain and View-Point Agnostic Hand Action Recognition. IEEE ROBOTICS AND AUTOMATION LETTERS. 6, 2021. ISSN 2377-3766
DOI: 10.1109/LRA.2021.3101822
Type of production: Scientific paper
- 6** Sabater, Alberto; Santos, Laura; Santos-Victor, Jose; Bernardino, Alexandre; Montesano, Luis; Murillo, Ana C.; IEEE Comp Soc. One-shot action recognition in challenging therapy scenarios. 2021 IEEE/CVF CONFERENCE ON COMPUTER VISION AND PATTERN RECOGNITION WORKSHOPS (CVPRW 2021). 2021. ISSN 2160-7508
DOI: 10.1109/CVPRW53098.2021.00312
Type of production: Scientific paper
Source of citations: WOS **Citations:** 1
- 7** Alonso; Sabater; Ferstl; Montesano; Murillo. Semi-supervised semantic segmentation with pixel-level contrastive learning from a class-wise memory bank. Proceedings of the IEEE/CVF International Conference on Computer Vision. 2021.
Type of production: Scientific paper
- 8** Alonso, Inigo; Riazuelo, Luis; Montesano, Luis; Murillo, Ana C.. 3D-MiniNet: Learning a 2D Representation From Point Clouds for Fast and Efficient 3D LIDAR Semantic Segmentation. IEEE ROBOTICS AND AUTOMATION LETTERS. 5, 2020. ISSN 2377-3766
DOI: 10.1109/LRA.2020.3007440
Type of production: Scientific paper
Source of citations: WOS **Citations:** 8
- 9** Schwarz, Andreas; Escolano, Carlos; Montesano, Luis; Mueller-Putz, Gernot R.. Analyzing and Decoding Natural Reach-and-Grasp Actions Using Gel, Water and Dry EEG Systems. FRONTIERS IN NEUROSCIENCE. 14, 2020.
DOI: 10.3389/fnins.2020.00849
PMID: 32903775
Type of production: Scientific paper
Source of citations: WOS **Citations:** 5
- 10** C. Escolano; E. Lopez-Larraz; J. Minguez; L. Montesano. Brain-Computer Interface-Based Neurorehabilitation: From the Lab to the Users' Home. International Conference on NeuroRehabilitation. 2020.
Type of production: Scientific paper
- 11** Sabater, Alberto; Montesano, Luis; Murillo, Ana C.; IEEE. Robust and efficient post-processing for video object detection. 2020 IEEE/RSJ INTERNATIONAL CONFERENCE ON INTELLIGENT ROBOTS AND SYSTEMS (IROS). 2020. ISSN 2153-0858
DOI: 10.1109/IROS45743.2020.9341600
Type of production: Scientific paper
Source of citations: WOS **Citations:** 1



- 12** Facil, Jose M.; Ummenhofer, Benjamin; Zhou, Huizhong; Montesano, Luis; Brox, Thomas; Civera, Javier; IEEE Comp Soc. CAM-Convs: Camera-Aware Multi-Scale Convolutions for Single-View Depth. 2019 IEEE/CVF CONFERENCE ON COMPUTER VISION AND PATTERN RECOGNITION (CVPR 2019). 2019. ISSN 1063-6919
DOI: 10.1109/CVPR.2019.01210
Type of production: Scientific paper
Source of citations: WOS **Citations:** 27
- 13** Sabater, Alberto; Montesano, Luis; Murillo, Ana C.; IEEE. Performance of object recognition in wearable videos. 2019 24TH IEEE INTERNATIONAL CONFERENCE ON EMERGING TECHNOLOGIES AND FACTORY AUTOMATION (ETFA). 2019. ISSN 1946-0740
Type of production: Scientific paper
- 14** Lopez-Larraz, Eduardo; Escolano, Carlos; Montesano, Luis; Minguez, Javier. Reactivating the Dormant Motor Cortex After Spinal Cord Injury With EEG Neurofeedback: A Case Study With a Chronic, Complete C4 Patient. CLINICAL EEG AND NEUROSCIENCE. 50, 2019. ISSN 1550-0594
DOI: 10.1177/1550059418792153
PMID: 30084262
Type of production: Scientific paper
Source of citations: WOS **Citations:** 5
- 15** Trincado-Alonso, Fernando; Lopez-Larraz, Eduardo; Resquin, Francisco; Ardanza, Aitor; Perez-Nombela, Soraya; Luis Pons, Jose; Montesano, Luis; Gil-Agudo, Angel. A Pilot Study of Brain-Triggered Electrical Stimulation with Visual Feedback in Patients with Incomplete Spinal Cord Injury. JOURNAL OF MEDICAL AND BIOLOGICAL ENGINEERING. 38, 2018. ISSN 1609-0985
DOI: 10.1007/s40846-017-0343-0
Type of production: Scientific paper
Source of citations: WOS **Citations:** 8
- 16** Lopez-Larraz, Eduardo; Ibanez, Jaime; Trincado-Alonso, Fernando; Monge-Pereira, Esther; Luis Pons, Jose; Montesano, Luis. Comparing Recalibration Strategies for Electroencephalography-Based Decoders of Movement Intention in Neurological Patients with Motor Disability. INTERNATIONAL JOURNAL OF NEURAL SYSTEMS. 28, 2018. ISSN 0129-0657
DOI: 10.1142/S0129065717500605
PMID: 29463157
Type of production: Scientific paper
Source of citations: WOS **Citations:** 8
- 17** Quintero-Quiroz, Carlos; Montesano, Luis; Pons, Antonio J.; Torrent, M. C.; Garcia-Ojalvo, Jordi; Masoller, Cristina. Differentiating resting brain states using ordinal symbolic analysis. CHAOS. 28, 2018. ISSN 1054-1500
DOI: 10.1063/1.5036959
PMID: 30384619
Type of production: Scientific paper
Source of citations: WOS **Citations:** 6
- 18** Omedes, J.; Schwarz, A.; Muller-Putz, G.R.; Montesano, L.. Factors that affect error potentials during a grasping task: toward a hybrid natural movement decoding BCI. JOURNAL OF NEURAL ENGINEERING. 15 - 4, pp. 046023 [14 pp]. 2018. ISSN 1741-2560
DOI: 10.1088/1741-2552/aac1a1
Type of production: Scientific paper

- 19** Rajasekaran, V.; Lopez-Larraz, E.; Trincado-Alonso, F.; Aranda, J.; Montesano, L.; Del-Ama, Aj.; Pons, J.L.. Volition-adaptive control for gait training using wearable exoskeleton: preliminary tests with incomplete spinal cord injury individuals. JOURNAL OF NEUROENGINEERING AND REHABILITATION. 15 - 4, pp. [15 pp]. 2018. ISSN 1743-0003
DOI: 10.1186/s12984-017-0345-8
Type of production: Scientific paper
- 20** Sburlea, Andreea Ioana.; Montesano, Luis; Minguez, Javier. Advantages of EEG phase patterns for the detection of gait intention in healthy and stroke subjects. JOURNAL OF NEURAL ENGINEERING. 14 - 3, pp. 036004 [15 pp]. 2017. ISSN 1741-2560
DOI: 10.1088/1741-2552/aa5f2f
Type of production: Scientific paper
Impact source: ISI
Impact index in year of publication: 3.920
Position of publication: 12
Impact source: ISI
Impact index in year of publication: 3.920
Position of publication: 73
Category: Science Edition - ENGINEERING, BIOMEDICAL
No. of journals in the cat.: 78
Category: Science Edition - NEUROSCIENCES
No. of journals in the cat.: 261
- 21** Antelis, J.M.; Montesano, L.; Ramos-Murguialday, A.; Birbaumer, N.; Minguez, J.. Decoding Upper Limb Movement Attempt from EEG Measurements of the Contralateral Motor Cortex in Chronic Stroke Patients. IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING. 64 - 1, pp. 99 - 111. 2017. ISSN 0018-9294
DOI: 10.1109/TBME.2016.2541084
Type of production: Scientific paper
Impact source: ISI
Impact index in year of publication: 4.288
Position of publication: 9
Category: Science Edition - ENGINEERING, BIOMEDICAL
No. of journals in the cat.: 78
- 22** Omedes, Jason; Schwarz, Andreas; Montesano, Luis; Mueller-Putz, Gernot; IEEE. Hierarchical decoding of grasping commands from EEG. 2017 39TH ANNUAL INTERNATIONAL CONFERENCE OF THE IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY (EMBC). 2017. ISSN 1094-687X
PMID: 29060307
Type of production: Scientific paper
Source of citations: WOS
Citations: 2
- 23** Omedes, J.; Schwarz, A.; Montesano, L.; Muller-Putz, G.. Hierarchical decoding of grasping commands from EEG. CONFERENCE PROCEEDINGS (IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY. CONF.). pp. 2085 - 2088. 2017. ISSN 1557-170X
DOI: 10.1109/EMBC.2017.8037264
Type of production: Scientific paper
- 24** Facil, Jose M.; Concha, Alejo; Montesano, Luis; Civera, Javier. Single-View and Multi-View Depth Fusion. IEEE ROBOTICS AND AUTOMATION LETTERS. 2, 2017. ISSN 2377-3766
DOI: 10.1109/LRA.2017.2715400
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Citations: 19



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Type of production: Scientific paper
- 26** Melinscak, F.; Montesano, L.; Minguez, J.. Asynchronous detection of kinesthetic attention during mobilization of lower limbs using EEG measurements. JOURNAL OF NEURAL ENGINEERING. 13 - 1, pp. 016018 (14pp). 2016. ISSN 1741-2560
DOI: 10.1088/1741-2560/13/1/016018
Type of production: Scientific paper
Impact source: ISI
Impact index in year of publication: 3.465
Position of publication: 13
Impact source: ISI
Impact index in year of publication: 3.465
Position of publication: 90
Category: Science Edition - ENGINEERING, BIOMEDICAL
No. of journals in the cat.: 77
Category: Science Edition - NEUROSCIENCES
No. of journals in the cat.: 258
- 27** Melinscak, F.; Montesano, L.. Beyond p-values in the evaluation of brain-computer interfaces: A Bayesian estimation approach. JOURNAL OF NEUROSCIENCE METHODS. 270, pp. 30 - 45. 2016. ISSN 0165-0270
DOI: 10.1016/j.jneumeth.2016.06.008
Type of production: Scientific paper
Impact source: ISI
Impact index in year of publication: 2.554
Position of publication: 146
Impact source: ISI
Impact index in year of publication: 2.554
Position of publication: 35
Category: Science Edition - NEUROSCIENCES
No. of journals in the cat.: 258
Category: Science Edition - BIOCHEMICAL RESEARCH METHODS
No. of journals in the cat.: 77
- 28** López-Larraz, E.; Trincado-Alonso, F.; Rajasekaran, V.; Pérez-Nombela, S.; Del-Ama, A.; Aranda, J.; Minguez, J.; Gil-Agudo, A.; Montesano, L.. Control of an ambulatory exoskeleton with a brain-machine interface for spinal cord injury gait rehabilitation. FRONTIERS IN NEUROSCIENCE. 10, pp. [15 pp]. 2016. ISSN 1662-4548
DOI: 10.3389/fnins.2016.00359
Type of production: Scientific paper
Impact source: ISI
Impact index in year of publication: 3.566
Position of publication: 83
Category: Science Edition - NEUROSCIENCES
No. of journals in the cat.: 258
- 29** Melinscak, Filip; Montesano, Luis. Sample size determination for BCI studies: how many subjects and trials?. 2016 38TH ANNUAL INTERNATIONAL CONFERENCE OF THE IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY (EMBC). 2016. ISSN 1557-170X
PMID: 28268616
Type of production: Scientific paper
- 30** J. Omedes; I.Iturrate; J.Minguez; L.Montesano. Analysis and asynchronous detection of gradually unfolding errors during monitoring tasks. Journal of Neural Engineering, In press.2015.
Type of production: Scientific paper
Format: Journal



- 31** Lopez-Larraz, E.; Trincado-Alonso, F.; Montesano, L.. Brain-machine interfaces for motor rehabilitation: Is recalibration important?. IEEE INTERNATIONAL CONFERENCE ON REHABILITATION ROBOTICS. 2015-September, pp. 223 - 228. 2015. ISSN 1945-7898
DOI: 10.1109/ICORR.2015.7281203
Type of production: Scientific paper
- 32** A. Sburleaa; L.Montesano; J.Minguez. Continuous detection of the self-initiated walking pre-movement state from EEG correlates without session-to-session recalibration. : Journal of Neural Engineering. 12 - 3, 2015.
Type of production: Scientific paper **Format:** Journal
- 33** E. Lopez; L. Montesano; A. Gil; J. Minguez; A. Oliviero; L. Montesano. Evolution of EEG Motor Rhythms after Spinal Cord Injury: A Longitudinal Study. PLOS One. 2015.
Type of production: Scientific paper **Format:** Journal
- 34** I. Iturrate; J. Grizou; J. Omedes; M. Lopes,; P. Oudeyer; L. Montesano. Exploiting task constraints for self-calibrated brain-machine interface control using error-related. PLOS One. 2015.
Type of production: Scientific paper **Format:** Journal
- 35** E. Lopez; Luis Montesano; A. Gil; J. Minguez. Continuous decoding of movement intention of upper limb self-initiated analytic movements from pre-movement EEG correlates. Journal of neuroengineering and rehabilitation. 11 - 1, 2014.
Type of production: Scientific paper **Format:** Journal
- 36** I.Iturrate; R. Chavarriaga; L.Montesano; J.Minguez; J. del Millan. Latency Correction of Event-Related Potentials Between Different Experimental Protocols. : Journal of Neural Engineering, In press.11 - 3, 2014.
Type of production: Scientific paper
- 37** D. Suarez. Revisiting LP-NUCA Energy Consumption: Cache Access Policies and Adaptive Block Dropping. : ACM Transactions on Architecture and Code Optimization, In press. 2014.
Type of production: Scientific paper
- 38** J. Antelis; L. Montesano; A. Ramos-Murguialday; N. Birbaumer; and J. Minguez. On the Usage of Linear Regression Models to Reconstruct Limb Kinematics from Low Frequency EEG Signals. : PlosOne 8(4). 2013.
Type of production: Scientific paper
- 39** I.Iturrate; L.Montesano; and J.Minguez. Task-Dependent Signal Variations in EEG Error-Related Potentials for Brain-Computer Interfaces. : Journal of Neural Engineering, vol. 10, no. 2,. pp. 026024. 2013.
Type of production: Scientific paper
- 40** L. Montesano; M. Lopes. Active learning of visual descriptors for grasping using non-parametric smoothed beta distributions. Robotics and autonomous systems. 2012.
Type of production: Scientific paper
- 41** G. Salvi; L. Montesano; A. Bernardino; J. Santos-Victor. Language bootstrapping: Learning word meanings from perception-action association. IEEE Transactions on Systems, Man and Cybernetics, Part B. 2012.
Type of production: Scientific paper
- 42** J. Antelís; Luis Montesano; Javier Minguez. Decoding of full 3D finger trajectories from EEG data. Int. Journal of Bioelectromagnetism. 2011.
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- 43** Giorgio Metta; Lorenzo Natale; Francesco Nori; Giulio Sandini; David Vernon; Luciano Fadiga; Claes von Hofsten; Kerstin Rosander; Manuel Lopes; José Santos-Victor; Alexandre Bernardino; Luis Montesano. The iCub humanoid robot: An open-systems platform for research in cognitive development. Neural Networks. 2010.
Type of production: Scientific paper
- 44** Luis Montesano; Javier Minguez; Marta Diaz-Boladeras; Sonu Bhaskar. Towards an Intelligent Wheelchair System for Cerebral Palsy Users. IEEE Transactions on Neural Systems and Rehabilitation Engineering. 2009.
Type of production: Scientific paper
- 45** Luis Montesano; Manuel Lopes; Alexandre Bernardino; José Santos-Victor. Learning object affordances: from sensory-motor coordination to social interaction. IEEE Transactions on robotics and automation. 2008.
Type of production: Scientific paper
- 46** Luis Montesano; Javier Mínguez; Luis Montano. Modelling dynamic environments for sensor-based motion planning. Autonomous Robots. 2008.
Type of production: Scientific paper
- 47** Luis Montesano; Javier Mínguez; Luis Montano. Lessons learned in sensor-based navigation systems. Journal of Advanced Robotics. 2006.
Type of production: Scientific paper
- 48** : Javier Mínguez; Luis Montesano; Florent Lamiroux. Metric-based iterative closest point scan matching for sensor displacement estimation. IEEE Transactions on robotics and automation. 2006.
Type of production: Scientific paper
- 49** G. Muller-Putz; A. Schwarz; J. Pereira; P. Ofner; B. Hensing; M. Schneiders; S. Stein; A. Ramsay; JH Williamson; R. Murray-Smith; G. Luzhnica; E. Veas; C. Escolano; L. Montesano; Loitz; Rupp. Non-invasive Brain-Computer Interfaces for Control of Grasp Neuroprosthesis: The European MoreGrasp Initiative. Neuroprosthetics and Brain-Computer Interfaces in Spinal Cord Injury. Springer, 2021.
Type of production: Book chapter
- 50** Ibanez, J.; Lopez-Larraz, E.; Monge, E.; Molina-Rueda, F.; Montesano, L.; Pons, J. L.. On Recalibration Strategies for Brain-Computer Interfaces Based on the Detection of Motor Intentions. CONVERGING CLINICAL AND ENGINEERING RESEARCH ON NEUROREHABILITATION II, VOLS 1 AND 2. 15, 2017. ISSN 2195-3562, ISBN 978-3-319-46668-2
DOI: 10.1007/978-3-319-46669-9_127
Type of production: Book chapter
- 51** Bayon-Calatayud, Manuel; Trincado-Alonso, Fernando; Lopez-Larraz, Eduardo; Montesano, Luis; Pons, Jose Luis; Gil-Agudo, Angel. Usability of the Combination of Brain-Computer Interface, Functional Electrical Stimulation and Virtual Reality for Improving Hand Function in Spinal Cord Injured Patients. CONVERGING CLINICAL AND ENGINEERING RESEARCH ON NEUROREHABILITATION II, VOLS 1 AND 2. 15, 2017. ISSN 2195-3562, ISBN 978-3-319-46668-2
DOI: 10.1007/978-3-319-46669-9_56
Type of production: Book chapter
- 52** Luis Montesano; Manuel Lopes; Francisco Melo; Alexandre Bernardino and José Santos-Victor. A Computational Model of Object Affordances. Advances in Cognitive Systems, IET. s, 2010.
Type of production: Book chapter
- 53** Manuel Lopes; Francisco Melo; Luis Montesano and José Santos-Victor. Cognitive Processes in Imitation: Overview and Computational Approaches. From motor to interaction learning in robots, Springer.2010.
Type of production: Book chapter

Works submitted to national or international conferences

- 1 Title of the work:** Asynchronous detection of error potentials
Name of the conference: Proceedings of the 6th Brain-Computer Interface Conference 2014
Date of event: 2014
J Omedes; I. Iturrate; L. Montesano.
- 2 Title of the work:** Brain connectivity in continuous error tasks
Name of the conference: Engineering in Medicine and Biology Society (EMBC),
Corresponding author: Yes
Date of event: 2014
Organising entity: IEEE
J Omedes; I Iturrate; L Montesano.
- 3 Title of the work:** Calibration-free BCI based control
Name of the conference: Twenty-Eighth AAAI Conference on Artificial Intelligence
Date of event: 2014
J Grizou; I. Iturrate; L Montesano; PY Oudeyer; M Lopes.
- 4 Title of the work:** Interactive learning from unlabeled instructions
Name of the conference: Thirtieth Conference on Uncertainty in Artificial Intelligence (UAI)
Date of event: 2014
J Grizou; I. Iturrate; L Montesano; PY Oudeyer; M Lopes.
- 5 Title of the work:** Latency correction of error-related potentials reduces BCI calibration time
Name of the conference: 6th Brain-Computer Interface Conference 2014
Date of event: 2014
I. Iturrate; R. Chavarriaga; L. Montesano; J. Minguez; J. del Millan.
- 6 Title of the work:** Learning Multiple Behaviors from Unlabeled Demonstrations in a Latent Controller Space
Name of the conference: International Conference on Machine Learning
Date of event: 2013
Javier Almingol; Luis Montesano and Manuel Lopes. "Actas de congreso LUGAR DE CELABRACION: Atlanta, USA".
- 7 Title of the work:** Shared-control brain-computer interface for a two dimensional reaching task using EEG error-related potentials
Name of the conference: IEEE Engineering in Medicine and Biology Society (EMBC)
Date of event: 2013
I.Iturrate; L.Montesano; and J.Minguez. "Actas de congreso LUGAR DE CELABRACION: Osaka, Japon".
- 8 Title of the work:** Using frequency-domain features for the generalization of EEG error-related potentials among different tasks,
Name of the conference: IEEE Engineering in Medicine and Biology Society (EMBC)
Date of event: 2013
J. Omedes; I.Iturrate; L.Montesano; and J.Minguez. "Actas de congreso LUGAR DE CELABRACION: Osaka, Japon".



- 9 Title of the work:** . Continuous Decoding of Motor Attempt and Motor Imagery from EEG Activity in Spinal Cord Injury Patients
Name of the conference: International Conference of the IEEE Engineering in Medicine and Biology Society
Date of event: 2012
 Eduardo López-Larraz; Javier M. Antelis; Ángel Gil-Agudo; Luis Montesano; Javier Minguez. "Actas de congreso LUGAR DE CELABRACION: San Diego, US".
- 10 Title of the work:** Continuous Decoding of Intention to Move in Severely Affected Chronic Stroke Patients from Contralateral Hemisphere Brain Oscillations
Name of the conference: International Conference of the IEEE Engineering in Medicine and Biology Society
Date of event: 2012
 Javier M. Antelis*; Luis Montesano; Ander Ramos Murguialday; Niels Birbaumer; Javier Minguez. "Actas de congreso LUGAR DE CELABRACION: San Diego, US".
- 11 Title of the work:** Detection of Movements with Attention or Distraction to the Motor Task During Robot-Assisted Passive Movements of the Upper Limb
Name of the conference: International Conference of the IEEE Engineering in Medicine and Biology Society
Date of event: 2012
 . Javier M. Antelis*; Luis Montesano; xavier giralt; Alicia Casals; Javier Minguez. "Actas de congreso LUGAR DE CELABRACION: San Diego, US".
- 12 Title of the work:** Latency Correction of Error Potentials Between Different Experiments Reduces Calibration Time for Single-Trial Classification
Name of the conference: International Conference of the IEEE Engineering in Medicine and Biology Society
Date of event: 2012
 I.Iturrate; R.Chavarriaga; L.Montesano; J.Minguez; and J.d.R.Millán. "Actas de congreso LUGAR DE CELABRACION: San Diego, US".
- 13 Title of the work:** Classification of Resting, Anticipation and Movement States in Self-Initiated Arm Movements for EEG Brain Computer Interfaces
Name of the conference: International Conference of the IEEE Engineering in Medicine and Biology Society
Date of event: 2011
 M. Lopez; L. Montesano; and J. Minguez. "Actas de congreso LUGAR DE CELABRACION: Boston, US".
- 14 Title of the work:** Dense Multi-Planar Scene Estimation from a Sparse Set of Images
Name of the conference: In IEEE/RSJ International Conference on Intelligent Robots and Systems
Date of event: 2011
 A.Argiles; J. Civera; L. Montesano. "Actas de congreso LUGAR DE CELABRACION: San Francisco, US".
- 15 Title of the work:** EEG Single-Trial Classification of Visual, Auditive and Vibratory Feedback Potentials in Brain-Computer Interface
Name of the conference: International Conference of the IEEE Engineering in Medicine and Biology Society
Date of event: 2011
 E. Lopez-Larraz; Marco Creatura; Iñaki Iturrate; Luis Montesano; and Javier Minguez. "Actas de congreso LUGAR DE CELABRACION: Boston, US".



- 16 Title of the work:** Minimizing calibration time of single-trial recognition of error potentials in brain-computer interfaces
Name of the conference: International Conference of the IEEE Engineering in Medicine and Biology Society
Date of event: 2011
I. Iturrate; L. Montesano; R. Chavarriaga; J.d.R. Millan; and J. Minguez. "Actas de congreso LUGAR DE CELABRACION: Boston, US".
- 17 Title of the work:** Single-Trial Classification of Feedback Potentials within Neurofeedback Training with an EEG Brain-Computer Interface
Name of the conference: International Conference of the IEEE Engineering in Medicine and Biology Society
Date of event: 2011
E. Lopez-Larraz; Iñaki Iturrate; Carlos Escolano; Isabel Garca; Luis Montesano; and Javier Minguez. "Actas de congreso LUGAR DE CELABRACION: Boston, US".
- 18 Title of the work:** Spatio-temporal Itering for EEG error related potentials
Name of the conference: International Conference of the IEEE Engineering in Medicine and Biology Society
Date of event: 2011
I. Iturrate; L. Montesano; R. Chavarriaga; J.d.R. Millan; and J. Minguez. "Actas de congreso LUGAR DE CELABRACION: Boston, US".
- 19 Title of the work:** . Active Body Schema Learning
Name of the conference: IEEE International Conference on Robotics and Automation
Date of event: 2010
Ruben Cantin-Martinez; Manuel Lopes and Luis Montesano. "Actas de congreso LUGAR DE CELABRACION: Alask1, EEUU".
- 20 Title of the work:** . Robot Reinforcement Learning using EEG-based reward signals
Name of the conference: IEEE International Conference on Robotics and Automation
Date of event: 2010
Iñaki Iturrate; Luis Montesano; Javier Minguez. "Actas de congreso LUGAR DE CELABRACION: Alaske, EEUU".
- 21 Title of the work:** A Generalization of the Metric-Based Iterative Closest Point Technique for 3D Scan Matching
Name of the conference: IEEE International Conference on Robotics and Automation
Date of event: 2010
Leopoldo Armesto; Luis Montesano; Javier Minguez. "Actas de congreso LUGAR DE CELABRACION: Alaske, EEUU".
- 22 Title of the work:** Active learning in Robotics
Name of the conference: Workshop on Active Learning, NIPS
Date of event: 2010
L. Montesano. "No hay. LUGAR DE CELABRACION: Vancouver, Canada".
- 23 Title of the work:** Real-Time Recognition of Feedback Error-Related Potentials during a Time-Estimation Task
Name of the conference: International Conference of the IEEE Engineering in Medicine and Biology Society
Date of event: 2010



E. Lopez-Larraz; I. Iturrate; L. Montesano; J. Minguez. "Actas de congreso LUGAR DE CELABRACION: Buenos Aires, Argentina".

- 24 Title of the work:** Single Trial Recognition of Error-Related Potentials During Observation of Robot Operation
Name of the conference: International Conference of the IEEE Engineering in Medicine and Biology Society
Date of event: 2010
I. Iturrate; L. Montesano; J. Minguez. "Actas de congreso LUGAR DE CELABRACION: Buenos Aires, Argentina".
- 25 Title of the work:** . Learning grasping affordances from local visual descriptors
Name of the conference: IEEE International Conference on Development and Learning
Date of event: 2009
Luis Montesano and Manuel Lopes. "Actas de congreso LUGAR DE CELABRACION: Shangai, China".
- 26 Title of the work:** .Affordance Based Word-To-Meaning Association
Name of the conference: IEEE International Conference on Robotics and Automation
Date of event: 2009
V. Kunic; G. Salvi; A. Bernardino; L. Montesano and J. Santos-Victor. "Actas de congreso LUGAR DE CELABRACION: Kobe, Japan".
- 27 Title of the work:** Associating word descriptions to learned manipulation task models
Name of the conference: IEEE / RSJ Conference on intelligent robots and systems
Type of participation: Participatory - oral communication
Date of event: 2008
V. Kunic; G. Salvi; A. Bernardino; L. Montesano and J. Santos-Victor. "Actas del Workshop on Grasp and Task Learning by Imitation LUGAR DE CELABRACION: Niza, Francia".
- 28 Title of the work:** Learning and Development
Name of the conference: IEEE / RSJ Conference on intelligent robots and systems, Workshop on
Date of event: 2008
M. Lopes; L. Montesano; F. Melo; José Santos-Victor. "No hay. LUGAR DE CELABRACION: Niza, Francia".
- 29 Title of the work:** Affordance-based imitation learning in robotic tasks
Name of the conference: IEEE / RSJ Conference on intelligent robots and systems
Date of event: 29/10/2007
M. Lopes; L. Montesano; F. Melo. ISBN ISBN 1-4244-1116-5
- 30 Title of the work:** Modelling affordances using Bayesian networks
Name of the conference: IEEE / RSJ Conference on intelligent robots and systems
Date of event: 29/10/2007
L. Montesano; M. Lopes; A. Bernardino; J. Santos-Victor. ISBN ISBN 1-4244-1116-5
- 31 Title of the work:** Affordances, development and imitation
Name of the conference: IEEE / RSJ Conference on intelligent robots and systems
Date of event: 19/07/2007
L. Montesano; M. Lopes; A. Bernardino; J. Santos-Victor. ISBN ISBN 1-4244-1116-5



- 32 Title of the work:** From sensory motor maps to affordances
Name of the conference: In Imitation in Animals and Artifacts, Artificial and Ambient Intelligence AISB
Type of participation: 'Participatory - poster
Date of event: 2007
L. Montesano; M. Lopes; A. Bernardino; and J. Santos-Victor. "No hay LUGAR DE CELABRACION: Madrid, Spain".
- 33 Title of the work:** Intelligent Robotic Mobility Sistem for Cognitive Disabled Children
Name of the conference: Second International Congress on Domotics, Robotics and Teleassistance
Date of event: 2007
J. Minguez; L. Montesano; M. Dias; C. Canalís. "Actas del congreso LUGAR DE CELABRACION: Madrid, Spain".
- 34 Title of the work:** Machine learning challenges for developmental robotics
Name of the conference: Workshop on Robotics Challenges for Machine Learning, in NIPS
Date of event: 2007
M. Lopes; L. Montesano; F. Melo. "No hay. LUGAR DE CELABRACION: Vancouver, Canadá".
- 35 Title of the work:** Towards the adaptation of a robotic wheelchair for cognitive disabled children
Name of the conference: IEEE / RSJ Conference on intelligent robots and systems
Date of event: 09/10/2006
Luis Montesano; Javier Minguez; José Manuel Alcubierre; Luis Montano. ISBN 1-4244-0259-X
- 36 Title of the work:** Optimal filtering for partially observed point processes using trans-dimensional monte carlo
Name of the conference: IEEE International conference on acoustics, speech and signal processing
Date of event: 18/05/2006
Arnaud Doucet; Luis Montesano; Ajay Jasra. ISBN 1-4244-0728-1
- 37 Title of the work:** Autonomous motion generation for a robotic wheelchair
Name of the conference: IEEE International conference on robotics and automation
Date of event: 15/05/2006
Luis Montesano; Javier Mínguez; Luis Montano. ISBN 0-7803-9506-9
- 38 Title of the work:** Towards 3d metric-based scan matching algorithms for mobile robot displacement estimation
Name of the conference: IEEE International conference on robotics and automation
Type of participation: 'Participatory - poster
Date of event: 15/05/2006
Lydia Biota; Luis Montesano; Javier Mínguez; Florent Lamiraux. "LUGAR DE CELABRACION: Orlando, EEUU".
- 39 Title of the work:** Optimal filtering of partially observed point processes
Name of the conference: , workshop on Recent advances in Monte Carlo based inference
Date of event: 2006
L. Montesano; A. Doucet; A. Jasra. "No hay LUGAR DE CELABRACION, Isaac Newton Institute for Mathematical Sciences".
- 40 Title of the work:** The importance of modeling dynamic environments to Improve Sensor-based Navigation..
Name of the conference: Workshop in Autonomous Sensor-based motion for complex robots in complex environments, IEEE International Conference on Robotics and Automation (ICRA)



Date of event: 2006

L. Montesano; J. Minguez and L. Montano. "Actas del workshop LUGAR DE CELABRACION: Orlando, USA".

- 41 Title of the work:** Voice controlled intelligent wheelchair
Name of the conference: First International Congress on Domotics, Robotics and Teleassistance
Date of event: 10/11/2005
J.M. Alcubierre; J. Minguez; L. Montesano; L. Montano; O. Saz and E. Lleida. ISBN 84-88934-22-X
- 42 Title of the work:** Cooperative localization fusing vision-based bearing measurements and motion
Name of the conference: IEEE / RSJ Conference on intelligent robots and systems
Date of event: 02/08/2005
Luis Montesano; José Gaspar; José Santos-Victor; Luis Montano. ISBN 0-7803-9178-0
- 43 Title of the work:** Probabilistic scan matching for motion estimation in unstructured environments
Name of the conference: IEEE / RSJ Conference on intelligent robots and systems
Date of event: 02/08/2005
Luis Montesano; Javier Minguez; Luis Montano. ISBN 0-7803-9178-0
- 44 Title of the work:** Metric-based scan matching algorithms for mobile robot displacement estimation
Name of the conference: IEEE International conference on robotics and automation
Date of event: 18/04/2005
Javier Mínguez; Luis Montesano; Florent Lamiroux. ISBN 0-7803-8915-8
- 45 Title of the work:** Modeling the static and the dynamic parts of the environment to improve sensor-based navigation
Name of the conference: IEEE International conference on robotics and automation
Date of event: 18/04/2005
Luis Montesano; Javier Mínguez; Luis Montano. ISBN 0-7803-8915-8
- 46 Title of the work:** An Architecture for Sensor-Based Navigation in Realistic Scenarios i.e. Dynamic and Troublesome
Name of the conference: IEEE / RSJ Conference on intelligent robots and systems
Date of event: 28/09/2004
Javier Minguez; Luis Montesano; Luis Montano. ISBN 0-7803-8463-6
- 47 Title of the work:** Relative localization for pairs of robots based on unidentifiable moving features
Name of the conference: IEEE / RSJ Conference on intelligent robots and systems
Date of event: 28/09/2004
Luis Montesano; Wolfram Burgard; Luis Montano. ISBN 0-7803-8463-6
- 48 Title of the work:** Identification of moving objects by a team of robots based on kinematic information
Name of the conference: IEEE / RSJ Conference on intelligent robots and systems
Date of event: 27/10/2003
Luis Montesano; Luis Montano. ISBN 0-7803-7860-1
- 49 Title of the work:** Mirror systems and imitation learning REF. REVISTA/LIBRO: Proceedings European Conference on Machine Learning. CLAVE: CL
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