

## Part A. PERSONAL INFORMATION

CV date

First and Family name	AINTZANE ARMENTIA DÍAZ DE TUESTA		
Social Security, Passport, ID number		Age	
Researcher numbers	Researcher ID		
	Orcid code		0000-0002-6612-241X

### A.1. Current position

Name of University/Institution	University of the Basque Country (UPV/EHU)		
Department	Systems Engineering and Automatic Control		
Address and Country	Faculty of Engineering in Bilbao Plaza Ingeniero Torres Quevedo, 1 48013 – Bilbao (Spain)		
Phone number	94 601 7216	E-mail	<a href="mailto:aintzane.armentia@ehu.eus">aintzane.armentia@ehu.eus</a>
Current position	Profesor Adjunto	From	20-09-2017
Espec. cód. UNESCO	331005	331102	330417
Palabras clave	Model-Based Development, industrial automation, Multi-Agent Systems, flexible manufacturing systems		

### A.2. Education

PhD	University	Year
PhD in Engineering ("Control, Automation and Robotics Engineering" PhD program)	University of the Basque Country (UPV/EHU)	2016
Telecommunications engineer	University of the Basque Country (UPV/EHU)	2001

### A.3. JCR articles, h Index, thesis supervised...

Co-Direction of ongoing thesis: 1 (Unai Gangoiti Gurtubay)

Aintzane has published 6 papers indexed in JCR (1 Q1, 2 Q2, 1 Q3, 2 Q4). According to Web of Science:

Total articles: 12

Sum of the times cited: 2

h-index: 3

Articles with citation data: 19

Average citations per Article: 1,83

## Part B. CV SUMMARY (max. 3500 characters, including spaces)

Aintzane Armentia received her degree in *Telecommunications Engineering* by the University of the Basque Country (UPV/EHU) in 2001. During those last two years she collaborated with a research group of that institution, where she developed her final project. Then, she continued researching through a grant of the Fundación de Centros Tecnológicos para el Fomento de la Tecnología. Afterwards, she started to work as an *analyst/programmer* during 5 years.

Thanks to the professional experience acquired and the training courses carried out during this period (all related to TIC technologies and programming languages), she gained a public contest for being research staff of the Department of Systems Engineering and Automatic Control, employed by a public project funded by the Regional Government of Bizkaia (DIPE 06/16). The contract lasted 16 months. After, she gained another public contest for being research staff, 41 months, of the same department but for a European project (iLAND ART-010000-2009-7). In 2011 she obtained her MSc degree in Control, Automation and Robotics Engineering, and in 2012 she gained a public contest for being assistant professor in the Department of Automatic Control and Systems Engineering. In 2016 she obtained her *PhD degree with the "Sobresaliente cum laude" grade*, and in April 2017 she became associate professor, in the same department.

As a researcher, she is part of the GCIS (Grupo de Control e Integración de Sistemas) research group of the Department of Automatic Control and Systems Engineering. Her

research has been mainly focused on applying *Model-Driven Engineering* and other software engineering paradigms (MDA, MDD, UML, XML technologies, etc) in order to support the development cycle of *distributed context-aware applications*. In fact, her PhD was related to this application domain. In the last two years, she has been exploring the *Multi-Agent Systems* approach for application execution management and QoS assurance. Field in which she is the co-director of a PhD thesis. Additionally, although her initial research domain is healthcare she is also other application domains such as *advanced manufacturing systems* (the main line of the GCIS research group) as well as *robotics*, this latter as a result of her research stay at the University of Jaén with the Robotics, Automatic and Vision research group (From May to July 2016).

As a result, Aintzane has published 6 papers indexed in JCR (1 Q1, 2 Q2, 1 Q3, 2 Q4). Additionally, she contributes to international and national conferences, related to the main research line of the group. In this context, it is important to remark 12 electronic publications at international conferences indexed in Web Of Science and Scopus, 3 of which are also indexed in the core conference DB.

## **Part C. RELEVANT MERITS**

### **C.1. Publications (including books)**

#### **1. WOS, JCR Q4**

Marcelo V. García, **Aintzane Armentia**, Federico Pérez, Elisabet Estévez, Marga Marcos. Vertical integration approach for the intelligent Oil & Gas field. at - Automatisierungstechnik, 56(10), 859-874 (2018).

**doi: 10.1515/auto-2018-0033**

#### **2. WOS, JCR Q1**

A. Agirre, **A. Armentia**, E. Estévez and M. Marcos. A Component-Based Approach for Securing Indoor Home Care Applications. Sensors, 18(1), 46 (2018).

**doi: 10.3390/s18010046**

#### **3. SCOPUS, SJR Q3**

**A. Armentia**, U. Gangoiti, D. Orive and M. Marcos. Dynamic QoS Management for Flexible Multimedia Applications. IFAC-PapersOnLine, 50(1), pp. 5920-5925 (2017).

**doi: 10.1016/j.ifacol.2017.08.1483**

#### **4. WOS, JCR Q2**

A. Agirre, J. Parra, **A. Armentia**, E. Estévez and M. Marcos. QOS Management For Dependable Sensory Environments. Multimedia Tools and Applications, 75 (21), pp. 13397-13419 (2016).

**doi: 10.1007/s11042-015-2781-4**

#### **5. WOS, JCR Q3**

A. Agirre, J. Parra, **A. Armentia**, E. Estévez and M. Marcos. QoS aware middleware support for dynamically reconfigurable component based IoT Applications. International Journal of Distributed Sensor Networks. Special Issue Sensor-Web Systems, Applications and Services. Article Numbre: 2702789 (2016).

**doi: 10.1155/2016/2702789**

#### **6. WOS, JCR Q4**

R. Priego, **A. Armentia**, E. Estévez and M. Marcos. Modeling Techniques as Applied to Generating Tool-Independent Automation Projects. AT-AUTOMATISIERUNGSTECHNIK, 64(4), pp. 325-340 (2016).

**doi: 10.1515/auto-2015-0072**

#### **7. WOS, JCR Q1**

**A. Armentia**, U. Gangoiti, R. Priego, E. Estévez and M. Marcos. Flexibility Support for Homecare Applications Based on Models and Multi-Agent Technology. *SENSORS*, 15(12), pp. 31939-31964 (2015).

**doi: 10.3390/s151229899**

## 8. SCOPUS, SJR Q3

**A. Armentia**, U. Gangoiti, R. Priego, E. Estévez and M. Marcos. A Multi-Agent Based Approach to Support Adaptability in Home Care Applications. *IFAC-PapersOnLine*, 48(10), pp: 1-6 (2015).

**doi: 10.1016/j.ifacol.2015.08.098**

## 9. SCOPUS, SJR Q3

**A. Armentia**, A. Agirre, E. Estévez, J. Perez and M. Marcos. Model Driven Design Support for Mixed-Criticality Distributed Systems. *IFAC-PapersOnLine*, 47(3), pp: 4441-4446 (2014).

**doi: 10.3182/20140824-6-ZA-1003.00585**

## 10. SCOPUS, SJR Q3

R. Priego, **A. Armentia**, D. Orive, E. Estévez and M. Marcos. A Model-based Approach for Achieving Available Automation Systems. *IFAC-PapersOnLine*, 47(3), pp: 3438-3443 (2014).

## C.2. Research projects and grants

### *Participating as researcher in research projects*

1. Project: Integración de Inteligencia distribuida y semántica en la factoría Inteligente (MINECO REF DPI2015-68602-R (subprograma DPI))  
Financing entity: Ministerio de Economía y Competitividad  
Call: Programa Estatal de I+D+i Orientada a los Retos de la Sociedad 2015  
Period: 01/01/2016 - 31/12/2018  
Senior scientist: Margarita Marcos Muñoz (UPV/EHU)  
Amount: 180.290,00€
2. Project: Aplicaciones de fabricación reconfigurables dirigidas por requisitos de QoS (DPI2012-37806-C02-01)  
Financing entity: Ministerio de Economía y Competitividad  
Call: Convocatoria de ayudas de Proyectos de Investigación Fundamental no orientada 2012  
Period: 01/01/2013-31/12/2015  
Senior scientist: Margarita Marcos Muñoz (UPV/EHU)  
Nº Investigadores participantes: 11  
Amount: 117.000,00€

### *Participating as employed researcher:*

1. Project: mlddLewAre for deterministic dynamically reconfigurable Networked embedded systems (REF ART-010000-2009-7)  
Financing entity: ARTEMIS, Ministerio de Ciencia y Tecnología.  
Call: Unión Europea (Unidad de Formación e Investigación).  
Period: 01/03/2009 - 28/08/2012  
Senior scientist: Margarita Marcos Muñoz (UPV/EHU).  
Amount: Total: 2.231.998,05€. UPV/EHU: 196.417,47€
2. Project: Interoperabilidad entre entornos de desarrollo de aplicaciones de automatización (REF DIPE 06/16)  
Financing entity: Diputación Foral de Bizkaia y la Sociedad Beaz, S.A,  
Call: CONVOCATORIA PARA LA CONCESIÓN DE AYUDAS A LA INVESTIGACIÓN EN LA UNIVERSIDAD DEL PAÍS VASCO.

Financing entity: Universidad del País Vasco (UPV/EHU)

Period: 01/12/2006 - 30/11/2008

Senior scientist: Margarita Marcos Muñoz (UPV/EHU).

Amount: 60.000€

*Participating as researcher in formalized research groups:*

1. Project: Sistemas Distribuidos Avanzados (I4.0) y Salud 4.0 (REF. GIU18/162)  
Financing entity: Universidad del País Vasco (UPV/EHU)  
Call: Ayudas a los grupos de Investigación UPV/EHU  
Period: 21/12/2018-20/12/2020  
Senior scientist: Marga Marcos Muñoz.  
Amount: 34.434,00€
2. Project: Sistemas distribuidos de control industrial y la aplicación de sistemas de control de tiempo real a diferentes campos de la industria (IT719-13)  
Financing entity: Gobierno Vasco  
Call: Grupo de Investigación del sistema universitario vasco, grupos consolidados  
Period: 01/01/2013-31/12/2015  
Senior scientist: Marga Marcos Muñoz.  
Amount: 43.000€
3. Project: Control inteligente e integración de energías renovables en sistemas eléctricos (UFI11/28)  
Financing entity: Universidad del País Vasco (UPV/EHU)  
Call: Sistema universitario vasco (Unidad de Formación e Investigación)  
Period: 01/11/2011-31/12/2016  
Senior scientist: Joseba Xabier Ostolaza Zamora (UPV/EHU)  
Amount: 11.532,83€
4. Project: Grupo de Control e Integración de Sistemas (GCIS) (REF. GIU10/20)  
Entidad Financiadora: Universidad del País Vasco (UPV/EHU)  
Call: Ayudas a los grupos de Investigación UPV/EHU  
Period: 01/12/2010-30/11/2013  
Senior scientist: Marga Marcos.  
Amount: 75.000€

### **C.3. Contracts**

### **C.4. Patents**

### **C.5, C.6, C.7... (e. g., Institutional responsibilities, memberships of scientific societies...)**