Part A. Personal Information

DATE	18/07/2019

Surname(s)	Marrón	
Forename	Marta	
Social Security, Passport, ID number	09006596A	
Sex	Female	
Age	43	
Researcher codes	WoS Researcher ID *(*)*	T-5343-2017
	SCOPUS Author ID *(*)*	7003748716
	Open Researcher and Contributor ID (ORCID)	0000-0001-7723-2262

(*) At least one of these is mandatory

A.1. Current position

Post/Professional Category	Associate Professor	
UNESCO Code	120304, 120310, 120314, 120315, 120325, 330703, 331102	
Key Words	Machine Learning, Probabilistics, Robotics, Computer Vision	
Name of the University/Institution	University of Alcala	
	Department/Centre	Electronics
	Full Address	Escuela Politécnica Superior, Campus Univ., Alcalá Henares, 28871, Spain
	Email Address	Marta.marron@uah.es
	Phone Number	+34-918856586
Start date	10/02/2009	

A.2. Education *(title, institution, date)*

Year	*University*	*Degree*	*Title*
1996	*University of Alcala*	*First degree*	*Bachelor in Electronics Telecommunication*
2000	*University of Alcala*	*Masters*	*Degree (MSc) in Electronics*
2008	*University of Alcala*	*PhD*	*PhD in Electronics and Intelligent Systems*

A.3. Indicators of Quality in Scientific Production *(See the instructions)*

a) RG Score: 19.23 (www.researchgate.net/profile/Marta_Marron-Romera) (>70% members of ResearchGate). h-index 10 without auto-citations. 368 citations (213 from 2015 to 2019).
b) 21 publications in international JCR indexed journals (9 Q1 and 2 D1).
c) According Google Academics, 670 citations, 320 from 2014. h-index 16 (12 from 2014) and i10-index 23 (12 from 2014).
d) Supervisor of 1 PhD evaluated with CumLaude (European PhD) and 2 under develop.
e) Positive valuation of 3 consecutive periods of the research activity (sexenios, Agencia Estatal de la Evaluación de la Calidad. Spanish Gov.), the last from 2009 to 2014

Part B. Free Summary of CV *(Max. of 3.500 characters, including spaces)*

Engineer in Electronics and Telecommunications from the University of Alcalá in 1996 and 2000, respectively, and PhD from the same university in 2008. She started working in the Electronics Department of the University of Alcalá as a researcher in 1996 and as a teaching staff (as assistant) in 1997. She is currently a Full Professor at the same university since 2008.

Her research activity began in 1999, when he joined the Electronic Engineering Group applied to Intelligent Spaces (GEINTRA, www.geintra-uah.org), in the University of Alcalá, where she is focused from the beginning in the area of intelligent systems and mobile robotics. In this line the works developed are mainly focused on probabilistic estimation (area in which she develops her PhD), objects localization and positioning with multiple sensor-networks, focusing during the last decade in vision sensors, she has deep experience in electronic control systems, image processing, and later on machine learning and Deep Learning. In parallel she has been working in the area of navigation, planning and generation of trajectories in real time for mobile systems, and applications to intelligent environments and to support disability

(ambience assisted living –AAL-). She made a long stay of 15 weeks in 2003 at the Swedish KTH, specifically at his Centre of Autonomous Systems, financed by a competitive grant.

Within her research experience, it is worth highlighting his participation more than 20 research projects financed in competitive public calls: 15 of them national (in 1 of them as principal investigator), and the rest for public and private entities (in 1 as principal investigator).

Author of around 30 articles in journals, 21 of them international indexed in the JCR, published in different magazines, going through peer reviews, and being many of them the best in their respective categories. Highlighted participation as a reviewer in highly valued journals in the field of applied engineering: IEEE Trans. on Multimedia, Autonomous Robots, Sensors, IEEE Trans. on Instrumentation and Measurements, etc. She is also the author of 5 international research book chapters.

She contributes with more than 90 communications to international conferences (and more than 20 in national ones) organized by highly recognized associations (most IEEE, ACM, etc. of which she is a member) in which a peer review is carried out, and participating in many of them as a reviewer, and as program chair in some (IECON, VISSAP, etc.).

Organizer of 2 workshops (Conference Series on Audio-Visual Signal Processing and Applications in Intelligent Spaces, years 2009 and 2014) and 1 Special Session (Multisensor Signal Processing for Applications in Intelligent Spaces) in the IEEE International Symposium on Industrial Electronics, and collaborator in the organization of numerous events of diffusion (congresses and international and national conferences).

She participates in 15 contracts with companies (in 1 of them as main researcher) and has 3 registered patents. He has directed 3 PhDs, 15 MsT and more than twenty of BSc final projects, especially in the areas of development and research of interest.

Part C. Relevant accomplishments

C.1. Publications

C. Santos-Pérez, J. Echevarria, F. Espinosa-Zapata, Marta Marrón Romera, C. Losada-Gutiérrez, D. Pizarro-Pérez, Digital implementation of a self-triggered control approach for a mechatronic platform: experimental results, (DOI: 10.1504/IJIMR.2018.090945), Int. J. Intelligent Machines and Robotics, 60-78, Vol. 1, No. 1, 2018.

Carlos A. Luna, Javier Macias-Guarasa, Cristina Losada-Gutierrez, Marta Marron-Romera, Manuel Mazo, Sara Luengo-Sanchez and Roberto Macho-Pedroso, Headgear Accessories Classification Using an Overhead Depth Sensor (DOI: 10.3390/s17081845), Sensors, 17(8), 1845-1853. 2017. JCR-2017: Q1, Impact: 2.667 (10/58 in Cathegory “INSTRUMENTS & INSTRUMENTATION”).

Marcos Baptista Ríos; Marta Marrón-Romera; Cristina Losada Gutiérrez; José Angel Cruz Lozano; Antonio del, Abril de Mur, Robust System for Partially Occluded People Detection in RGB Images,Proceedings of the 12th International Joint Conference on Computer Vision, Imaging and Computer, Graphics Theory and Applications. 532 - 539. ISBN 978-989-758-225-7, DOI: 10.5220/0006165005320539.

Cristina Losada Gutiérrez; Felipe Espinosa Zapata; Carlos Santos Pérez; Manuel Gálvez Gálvez; Emilio José Bueno Peña; Marta Marrón Romera; Francisco Javier Rodríguez Sánchez, An Experience of CACSD for Networked Control Systems: From Mechatronic Platform Identification to Control Implementation, IEEE Transactions on Education, 0018-9359. 2016. JCR-2014: Q3, Impact: 0.842 (160/249 in Cathegory “ENGINEERING, ELECTRICAL & ELECTRONIC”).

Álvaro Marcos Ramiro; Daniel Pizarro Pérez; Marta Marrón Romera; Daniel Gatica Perez, Let Your Body Speak: Communicative Cue Extraction on Natural Interaction Using RGBD Data, IEEE Transactions on Multimedia, 1520-9210. 2015. JCR-2014: Q1, Impact: 2.303 (5/104 in Cathegory “COMPUTER SCIENCE, SOFTWARE ENG.”).

Cristina Losada Gutiérrez; Manuel R. Mazo Quintas; Sira Elena Palazuelos Cagigas; Marta Marrón Romera; Daniel Pizarro Pérez; José Francisco Velasco Cerpa, Identification and Tracking of Robots in an Intelligent Space using Static Cameras and an XPFCP. (DOI: 10.1016/j.robot.2012.11.007), Robotics and Autonomous Systems, 2/61, 75-85, 0921-8890.

2013. JCR-2013: Impact: Q3, 1.105 (67/121 in Cathegory "COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE").

Felipe Espinosa Zapata; Carlos Santos Pérez; Marta Marrón Romera; Daniel Pizarro Pérez; Fernando Valdés Villarubia; Francisco Javier Dongil Moreno, Odometry and Laser Scanner Fusion Based on a Discrete Extended Kalman Filter for Robotic Platooning Guidance, Sensors, 11, 8339-8357, 1424-8220. 2011. JCR-2011: Q1, Impact: 1.739 (14/58 in Cathegory "INSTRUMENTS & INSTRUMENTATION").

Marta Marrón Romera; Juan Carlos García García; Miguel A. Sotelo Vázquez; Daniel Pizarro Pérez; Manuel R. Mazo Quintas; José María Cañas Plaza; Cristina Losada Gutiérrez; Álvaro Marcos Ramiro, Stereo Vision Tracking of Multiple Objects in Complex Indoor Environment. Sensors, 10/10, 8865-8887, 1424-8220. 2010. JCR-2010: Q1, Impact: 1.774 (14/61 in Cathegory "INSTRUMENTS & INSTRUMENTATION").

Cristina Losada Gutiérrez; Manuel R. Mazo Quintas; Sira Elena Palazuelos Cagigas; Daniel Pizarro Pérez; Marta Marrón Romera, Multi-Camera Sensor System for 3D Segmentation and Localization of Multiple Mobile Robots. (DOI:10.3390/s100403261), Sensors, 4/10, 3261-3279, 1424-8220. 2010. JCR-2010: Q1, Impact: 1.774 (14/61 in Cathegory "INSTRUMENTS & INSTRUMENTATION").

C.2. Research Projects and Grants

Principal Investigator at:

Title: Detección Semántica Multisensorial de Situaciones Anómalas en Entornos Sin Restricciones (HEIMDAL). (TIN2016-75982-C2-1-R)
Financed by: Ministerio de Economía y Competitividad
Participants: UAH, UPM.
Duration: 30/12/2016 - 29/12/2020 Budget: 127.776€
Principal Investigator: Macias Guarasa, Javier (UAH); Marrón Romera, Marta (UAH).

Title: Sistema de Ayuda a la movilidad Robotizado (SAR). (CCG2018/EXP-059)
Financed by: UAH
Duration: 01/01/2019 - 31/12/2020 Budget: 3.000€
Principal Investigator: Marrón Romera, Marta (UAH).

Researcher at:

Title: Supervisión de Patrones de Comportamiento Humano mediante Múltiples Sensores. (SPACES) (TIN2013-47630-C2-1-R)
Financed by: Ministerio de Economía y Competitividad
Participants: UAH, UPM.
Duration: 01-01/2014 - 31-12-2016 Budget (UAH): 130.419,85€
Principal researchers: Macías Guarasa, Javier (UAH); Mazo Quintas, Manuel R (UAH).

Title: Localización de múltiples agentes en espacios inteligentes mediante sensores de ultrasonidos, video y audio. (FUVA) (CCG10-UAH/TIC-5988)
Financed by: CAM-UAH
Participants: UAH.
Duration: 01/01/2011 - 29/02/2012 Budget: 12.000€
Principal Investigator: Pizarro Pérez, Daniel (UAH).

Title: Identificación e Interacción de Agentes Múltiples en Espacios Inteligentes Usando Arrays de Cámaras. (VISNU) (TIN2009-08984)
Financed by: Ministerio de Ciencia e Innovación
Participants: UAH.
Duration: 01/01/10 - 31/12/12 Budget: 194.205,01€
Principal Investigator: Santiso Gómez, Enrique (UAH).

Title: Tecnologías de fusión sensorial audio-visual para sist. diálogo hablado multidominio. (SD-TEAM) (TIN2008-06856-C05-05)
Financed by: Dirección General de Investigación
Participants: UAH.
Duration: 01/01/2009 - 31/12/2011 Budget: 26.620€
Principal Investigator: Macías Guarasa, Javier (UAH).

C.3. Contracts

Title: Sistema Inteligente Detección Seguimiento Personas Cámaras Profundidad (OWLET)
Company: LANACCESS TELECOM S.A.
Participants: Electronics Department. University of Alcalá
Duration: 15/04/2018-15/07/2009 Budget: 23.200€
Principal Investigator: Pizarro Pérez, Daniel; Luna Vázquez, Carlos

Title: Sistema de Comunicación Mediante PLC (G-LINK)
Company: GAMMA SOLUTIONS.
Participants: Electronics Department. UAH
Duration: 15/07/2014-14/11/2014 Budget: 40.000€
Principal Investigator: García García, Juan Carlos; Marrón Romera, Marta

Title: Detección Temprana de Amenazas a la Integridad de Gasoductos usando Tecnología de Fibra Óptica (PIT-STOP)
Company: FIBER OPTICS CONSULTING SERVICES AND TEC.
Participants: Electronics Department. UAH
Duration: 17/12/2013-16/06/2015 Budget: 84.000€.
Principal Investigator: Macías Guarasa, Javier; Martín López, Sonia

Title: Estudio para el Diseño de Algoritmos y Desarrollo de un Sistema de Reconocimiento de Vehículos y Personas para el Control de Acceso Inteligente de los Aparcamientos
Company: IDC TECNOLOGÍA DE INSTALACIONES INDUSTRIALES, S.L.
Participants: Electronics Department. UAH
Duration: 11/03/2010-10/12/2010 Budget: 12.528€
Principal Investigator: Pizarro Pérez, Daniel

Title: Software de Comunicación de Video con Codificación MPEG4 sobre RTP y mensajes utilizando Protocolos XML a través de Redes Inalámbricas
Company: SISTEMAS DE CONTROL E INFORMACIÓN, S.L. (SEPSA-SCI).
Participants: Electronics Department. UAH
Duration: 13/10/2009-31/12/2009 Budget: 17.400€
Principal Investigator: Mazo, Manuel R.; Rodríguez, Francisco Javier; Pizarro, Daniel

C.4. Patents and other IPR

Inventors: Carlos A. Luna Vázquez, Manuel R. Mazo Quintas Sira Elena Palazuelos Cagigas, Javier Macías Guarasa, Cristina Losada Gutiérrez y Marta Marrón Romera
Title: Sistema sensor y procedimiento para detectar los ejes de los trenes utilizando fibra óptica y cámaras de tiempo de vuelo
ID-number: 201330515, Publishing-number: ES2506 590
Nationality: Spain Date: 21/07/2015 Titular: UAH

Inventors: Francisco Javier Rodríguez Sánchez; David Jiménez Cabello; DanielPizarro Pérez; Sira Elena Palazuelos Cagigas; Alfredo Gardel Vicente; Manuel R. Mazo Quintas; Ignacio Bravo Muñoz; Marta Marrón Romera
Title: Sistema sensor para detección de objetos/obstáculos en ptos críticos líneas férreas
ID-number: 201000354, Publishing-number: ES2377802
Nationality: Spain Date: 01/02/2013 Titular: UAH

Inventors: Juan Carlos García García; Manuel R. Mazo Quintas; Marta Marrón Romera; Eduardo Sebastián Martínez
Title: Sistema de guiado de vehículos basado en comandos de soplo
ID-number: 200202213, Publishing-number: ES2204320
Nationality: Spain Date: 22/02/2005 Titular: UAH