

CV Date	16/02/2026
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## Part A. PERSONAL INFORMATION

First Name	Crescencio		
Family Name	Bravo Santos		
Sex	Male	Date of Birth	
ID number Social Security, Passport			
URL Web			
Email Address			
Open Researcher and Contributor ID (ORCID)	0000-0003-4380-1193		

### A.1. Current position

Job Title	Catedrático de Universidad (Professor)		
Starting date	2019		
Institution	Universidad de Castilla-La Mancha		
Department / Centre	Tecnologías y Sistemas de Información / Escuela Superior de Informática		
Country	Spain	Phone Number	
Keywords	120304 - Artificial intelligence		

### A.2. Previous positions (Research Career breaks included)

Period	Job Title / Name of Employer / Country
2008 - 2019	Titular de Universidad / UCLM
2007 - 2008	Profesor Contratado Doctor Nivel 2 / UCLM
2006 - 2007	Profesor Contratado Doctor Nivel 1 / UCLM
2002 - 2006	Profesor Asociado Tiempo Completo Nivel 3 / UCLM
2001 - 2002	Profesor Asociado Tiempo Completo Nivel 2 / UCLM
2000 - 2001	Profesor Ayudante de Escuela Universitaria / UCLM
1999 - 2000	Profesor Ayudante de Escuela Universitaria / UCLM

### A.3. Education

Degree/Master/PhD	University / Country	Year
Programa Oficial de Doctorado en Tecnologías Informáticas Avanzadas	Universidad de Castilla-La Mancha	2002
Licenciado en Informática	Universidad de Sevilla	1996
Ingeniero Técnico en Informática de Gestión	Universidad de Castilla-La Mancha	1993

## Part B. CV SUMMARY

**Keywords:** Interacción Persona-Ordenador (HCI), CSCW/Groupware, Desarrollo Dirigido por Modelos (MDD), Eye tracking, Usability and accessibility.

My research focuses on the application of Software Engineering techniques to the development of collaborative and interactive systems in the fields of Education, Design and, more recently, Health (autism).

■ **Research sexennials:** 4(2000-2005; 2006-2011; 2012-2017; 2019-2024)

■ **Theses supervised in the last 10 years:** 2 (in 2010), 1 in progress

■ **Total number of citations in publications:**

WOS (core collection): 565

SCOPUS: 780 (430 desde 2016)  
GOOGLE SCHOLAR: 1.910 (742 desde 2016)

■ **Number of publications indexed in ISI-JCR: 32 (10 Q1 and 9 Q2)**

■ **H-index: 13 WOS (core collection) / 15 SCOPUS / 23 Google Scholar**

■ **i10-index: 46 (Google Scholar).**

■ **Selected publications:**

<http://blog.uclm.es/crescenciobravo/publicaciones/>

■ **Research (personal) lines:**

-L1. Modelling and analysis of collaboration by means of methods, computational tools and model design and specification.

-L2. Building of domain-independent groupware systems by means of MDA and MDD.

-L3. Collaborative learning of programming by means of groupware technologies

■ **Quality and dissemination of the research activity**

Journal, conference and book publications of quality, subjected to a pair review process and with international program committee, as follows:

32 publications in journals indexed by ISI-JCR

3 publications in conferences with rigorous selection criteria

9 book chapters in the prestigious editorials Springer and Kluwer; several of them are post-proceedings with a selection of best papers

2 books as editor corresponding to the proceedings of an international conference and to a selection of best papers in a conference

+50 publications in international conferences, some of them included in LNCS/LNAI volumes of Springer indexed by ISI-JCR in the corresponding year

(see <http://blog.uclm.es/crescenciobravo/publicaciones/> for a selection of the best publications)

■ **Quality and number of research projects and contracts:**

Continuous participation as collaborator or main researcher in research projects funded by national and regional organizations in competitive calls.

■ **Other merits related to research activity:**

-Reviewer of 6 prestigious international journals indexed by ISI-JCR

-Participation in thesis tribunals

-2 Best paper awards in conferences

■ **Teaching:**

29 years of teaching experience (1998-2026) in the academic area of Computer Science Systems and Languages (LSI, Lenguajes y Sistemas Informáticos)

■ **Unipersonal positions of responsibility in university management:**

-Academic Director of Vice-Rector's Office for 5 years (statutory position)

-General Secretary of UCLM from March 2013 to December 2020 (statutory position)

-Vocal of the Executive Committee of CRUE-TIC from April 2014 to April 2016

-Dean of Faculty of Computer Science (statutory position), from May 2021 at present

**Part C. RELEVANT ACCOMPLISHMENTS**

### C.1. Most important publications in national or international peer-reviewed journals, books and conferences

AC: corresponding author. (n° x / n° y): position / total authors. If applicable, indicate the number of citations

- 1 **Scientific paper.** A.I.; C.; J.; C.; M.A.2024. Awareness support in collaborative programming tools: An evaluation based on programmer's perception and eye tracking. *Journal of Systems and Software*. 220. ISSN 0164-1212. <https://doi.org/10.1016/j.jss.2024.112276>
- 2 **Scientific paper.** M.; S.; C.; A.I.; M.2024. Excursiona: A collaborative mobile application for excursions in nature. *SoftwareX Journal*. 28. ISSN 2352-7110. <https://doi.org/10.1016/j.softx.2024.101908>
- 3 **Scientific paper.** A.I.; Y.; C.; M.A.; C.; M.2024. Eye tracking-based evaluation of accessible and usable interactive systems: tool set of guidelines and methodological issues. *Universal Access in the Information Society*. ISSN 1615-5297. <https://doi.org/10.1007/s10209-023-01083-x>
- 4 **Scientific paper.** S.; F.; J.; J.; J.A.; C.2023. A Methodological Approach for the Smartification of a University Campus: The Smart ESI Use Case. *Buildings*. 13 (10)-2568. ISSN 2075-5309. <https://doi.org/10.3390/buildings13102568>
- 5 **Scientific paper.** R.; C.; S.; D.2023. Leveraging a visual language for the awareness-based design of interaction requirements in digital twins. *Future Generation Computer Systems*. 153, pp.41-51. ISSN 0167-739X. <https://doi.org/10.1016/j.future.2023.11.018>
- 6 **Scientific paper.** C.; R.; A.I.; J.2023. Modeling Awareness Requirements in Groupware: From Cards to Diagrams. *IEEE TRANSACTIONS ON HUMAN-MACHINE SYSTEMS*. 54, pp.1-12. ISSN 2168-2291. <https://doi.org/10.1109/THMS.2023.3332592>
- 7 **Scientific paper.** Gallardo, J.; Bravo, C.; Molina, A.I.2018. A framework for the descriptive specification of awareness support in multimodal user interfaces for collaborative activities. *Journal on Multimodal User Interfaces*. 12-2, pp.145-159. ISSN 1783-7677. <https://doi.org/10.1007/s12193-017-0255-x>
- 8 **Scientific paper.** Duque, Rafael; Gómez-Pérez, Domingo; Nieto-Reyes, Alicia; Bravo, Crescencio. 2015. Analyzing collaboration and interaction in learning environments to form learner groups. *Computers in Human Behavior*. 47-Supplement C, pp.42-49. ISSN 0747-5632. <https://doi.org/10.1016/j.chb.2014.07.012>
- 9 **Scientific paper.** Bravo, Crescencio; Duque, Rafael; Gallardo, Jesús. 2013. A groupware system to support collaborative programming: Design and experiences. *Journal of Systems and Software*. 86-7, pp.1759-1771. ISSN 0164-1212. <https://doi.org/10.1016/j.jss.2012.08.039>
- 10 **Scientific paper.** Gallardo, Jesús; Molina, Ana I.; Bravo, Crescencio; Redondo, Miguel A.2013. A model-driven and task-oriented method for the development of collaborative systems. *Journal of Network and Computer Applications*. 36-6, pp.1551-1565. ISSN 1084-8045. <https://doi.org/10.1016/j.jnca.2013.03.016>
- 11 **Scientific paper.** Duque, R.; Bravo, C.; Ortega, M.2013. An ontological approach to automating collaboration and interaction analysis in groupware systems. *Knowledge-Based Systems*. 37, pp.211-229. ISSN 0950-7051. <https://doi.org/10.1016/j.knosys.2012.08.005>
- 12 **Scientific paper.** Gallardo, Jesús; Bravo, Crescencio; Redondo, Miguel A.; de Lara, Juan. 2013. Modeling collaboration protocols for collaborative modeling tools: Experiences and applications. *Journal of Visual Languages & Computing*. 24-1, pp.10-23. ISSN 1045-926X. <https://doi.org/10.1016/j.jvlc.2012.10.006>
- 13 **Scientific paper.** Gallardo, J.; Bravo, C.; Redondo, M.A.2012. A model-driven development method for collaborative modeling tools. *Journal of Network and Computer Applications*. 35-3, pp.1086-1105. ISSN 1084-8045. <https://doi.org/10.1016/j.jnca.2011.12.009>

- 14 Scientific paper.** Gallardo, J.; Molina, A.I.; Bravo, C.; Redondo, M.A.; Collazos, C.A. 2011. An ontological conceptualization approach for awareness in domain-independent collaborative modeling systems: Application to a model-driven development method. *Expert Systems with Applications*. 38-2, pp.1099-1118. ISSN 0957-4174. <https://doi.org/10.1016/j.eswa.2010.05.005>

## C.2. Conferences and meetings

- 1 Palazuelos, C.; Duque, R.; Bravo, C.. Towards a Tutoring Method in CSCL Environments through Prediction of Analysis Indicators using Generalized Linear Models. 2024 International Symposium on Computers in Education (SIIE). 2024. Spain. Conference.
- 2 Sánchez, S.; Redondo, M.A.; Vallejo, D.; González, C.; Bravo, C.. COLLECE 2.0: A distributed real-time collaborative programming environment for the Eclipse platform. Multi-Conference on Computer Science and Information Systems (MCCSIS) – Interfaces and Human Computer Interaction. 2017. Portugal.
- 3 Molina, A.I.; Gallardo, J.; Redondo, M.A.; Bravo, C.. Evaluating the awareness support of COLLECE, a collaborative programming tool [premio al mejor artículo]. XV International Conference on Human Computer Interaction (Interacción '14). 2014. Spain.
- 4 Duque, R.; Bravo, C.; Lacave, C.. Analyzing Collaborative Problem Solving with Bayesian Networks. The Twenty-sixth SGA International Conference on Innovative Techniques and Applications of Artificial Intelligence (AI-2006). 2006. United Kingdom.
- 5 Bravo, C.; Redondo, M.A.; Ortega, M.; Verdejo, M.F.. Collaborative Discovery Learning of Model Design. 6th International Conference on Intelligent Tutoring Systems (ITS'2002). 2003. France.

## C.3. Research projects and contracts

- 1 **Project.** FRAWA: Framework para el diseño y la mejora del awareness en sistemas groupware. Aplicaciones en vitivinicultura y ecoturismo (SBPLY/21/180501/000244). Crescencio Bravo Santos. (Dirección General Universidades, Investigación e Innovación). 01/09/2022-31/12/2025. 105.040,88 €.
- 2 **Project.** CODIFICA: Desarrollo y evaluación de un entorno que soporte diferenciación individual e interacción natural en tareas colaborativas de programación (Ref. PID2021-125122OB-100). Ana I. Molina Díaz. (Ministerio de Ciencia e Innovación). 01/09/2023-31/08/2025. 97.798,6 €.
- 3 **Project.** APTEA: Desarrollo y evaluación de una solución software que de soporte a la autonomía personal en tareas cotidianas a personas con TEA de alto funcionamiento (Ref. TED2021-131956B-I00). Ana I. Molina Díaz. (Ministerio de Ciencia e Innovación). 01/12/2022-31/12/2024. 102.350 €.
- 4 **Project.** Desarrollo de sistemas inmersivos para el aprendizaje de la programación (IAPRO). Ministerio de Economía y Competitividad. Programa Estatal de Investigación, Desarrollo e Innovación orientada a los Retos de la Sociedad. Miguel Ángel Redondo Duque. (Universidad de Castilla-La Mancha). 01/01/2016-31/12/2019. 191.906 €.
- 5 **Project.** Infrastructure for improving awareness and productivity in electronic meetings in collaborative work settings within large organizations. Ministerio de Economía y Competitividad. Secretaría de Estado de I+D+i (Infraestructuras). Crescencio Bravo Santos. (Universidad de Castilla-La Mancha). 01/01/2013-31/12/2015. 215.343 €.
- 6 **Project.** Entorno software para el aprendizaje en grupo de la programación y su integración, mediante estándares, en sistemas de gestión del aprendizaje. Ministerio de Ciencia e Innovación. Miguel Ángel Redondo Duque. (Universidad de Castilla-La Mancha). 01/01/2012-31/12/2015. 26.499 €.
- 7 **Project.** Framework para Análisis Proceso-Producto en Entornos Colaborativos. Junta de Comunidades de Castilla - La Mancha. Crescencio Bravo Santos. (Universidad de Castilla-La Mancha). 01/03/2007-31/12/2009. 18.150 €.
- 8 **Contract.** Dirección de Aula de colaboración Alpinia Technologies S.L.-UCLM - Programa de Cátedras y Aulas universidad-empresa de la UCLM Alpinia Technologies. 12/12/2018-12/12/2020. 20.000 €.