

CURRICULUM VITAE ABREVIADO (CVA)

IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

Part A. PERSONAL INFORMATION

First name	Raquel		
Family name	Hervás	Ballesteros	
Gender (*)	Female	Birth date	22/01/1980
e-mail	raquelhb@fdi.ucm.es	Link cvn:	
Open Researcher and Contributor ID (ORCID) (*)	0000-0003-2900-9992		

A.1. Current position

Position	Profesora Titular de Universidad		
Initial date	23/03/2021		
Institution	Universidad Complutense de Madrid		
Department/Center	Ingeniería del Software e Inteligencia Artificial Facultad de Informática		
Country	Spain	Teleph. number	913947516
Keywords	Accesibility, Natural Language Generation, Natural Language Processing, Human-Computer Interaction, Computational Creativity		

A.3. Education

Ph.D. Computer Science	Universidad Complutense de Madrid	2009
Ingeniería Superior en Informática	Universidad Complutense de Madrid	2004

Part B. Description of relevant aspects of your trajectory that reflect your interdisciplinary profile (1 page)

Dr. Raquel Hervás, with a Ph.D. in Computer Engineering from the Complutense University of Madrid, has been involved in research for 16 years. Her research work has focused on fields such as **Natural Language Generation** (developing tools for real-time text generation for various domains, from dialogue systems to narrative texts), **Accessability** (applying language generation and analysis techniques for the inclusion of people with disabilities), and **Computational Creativity** (in diverse areas such as the generation of rhetorical figures and poetry). This activity has resulted in over **80 publications**, both national and international, including articles in journals (**19 of them indexed in JCR and/or SJR indices**) and conference papers (including **17 articles in CORE-ranked conferences**) in the research areas she works in. Of these, 28 publications are from the last 6 years (9 indexed in JCR, and 5 conference articles in CORE).

She has also participated in numerous competitive research projects (**13 projects, 3 of them European, 1 as PI**), taking on both development and management tasks. Her role as the **principal investigator** in the IDiLyCo project of the National R&D&I Plan oriented towards Society's Challenges is noteworthy. In the context of this project, she has collaborated with associations and educational centers in the field of accessability and has contributed to the development of numerous applications available to these groups.

Her research training includes various collaborations with both Spanish and foreign universities. These collaborations have resulted in two predoctoral stays at the University of Coimbra, Portugal, a six-month postdoctoral stay at the Massachusetts Institute of Technology (MIT) in the United States, and **20 publications with foreign authors**.

She has also promoted teaching innovation projects, acting as the principal investigator in one of them, and regularly contributes to the organization of scientific activities and the supervision of work at all levels (1 doctoral thesis, 10 Master's theses, 21 Bachelor's theses).

Currently, she serves as the Vice-Dean of Studies and Quality Assurance at the School of Computer Science at the Complutense University of Madrid (since 2018), and previously held the

position of Academic Secretary of the Department of Software Engineering and Artificial Intelligence in the same school (2015-2018).

She is also an elected **Board Member** (2021-2024) of the Special Interest Group on Natural Language Generation of the ACL (SIGGEN), which promotes international research in Natural Language Generation and organizes the most important conferences in this field.

Part C. List of Merits

C.1. Publications

Full list available in [http://nil.fdi.ucm.es/?q=biblio&f\[author\]=216](http://nil.fdi.ucm.es/?q=biblio&f[author]=216).

JOURNALS IN THE JCR INDEX:

1. Francisco, V., Moreno-Ger, P., & Hervás, R. (2022). Application of Competitive Activities to Improve Students' Participation. *IEEE Transactions on Learning Technologies*, 2022. In press. (Q2)
2. Daniel Guasch, Israel Martín-Escalona, José A. Macías, Virginia Francisco, Raquel Hervás, Lourdes Moreno, Susana Bautista. (2021). Design and Evaluation of ECO: an Augmentative and Alternative Communication Tool. *Universal Access in the Information Society*. Springer, 1615-5297. 2022. (Q2)
3. R. Hervás, Bautista, S., Méndez, G., Galván, P., and Gervás, P., "Predictive Composition of Pictogram Messages for Users with Autism", *Journal of Ambient Intelligence and Humanized Computing*, 2020. (Q1)
4. Méndez, G., Hervás, R., Gervás, P., Martín, A., Julca, F. (2019) Dynamic emphatical narration for reduced authorial burden and increased user freedom in interactive storytelling. *Connect. Sci.* 31(1) (Q3)
5. Martins, P., Oliveira, H.G., Gonçalves, J., Cruz, A., Cardoso, A., Znidarsic, M., Lavrac, N., Linkola, S., Toivonen, H., Hervás, R., Méndez, G., Gervás, P. (2019). Computational creativity infrastructure for online software composition: A conceptual blending use case. *IBM Journal of Research and Development*, 63(1) (Q4)
6. Xiao, P. Toivonen, H., Gross, O., Cardoso, A., Correia, J., Machado, P., Martins, P., Oliveira, H. G., Sharma, R., Pinto, A. Miguel, Díaz, A., Francisco, V., Gervás, P., Hervás, R., León, C., Forth, J., Purver, M., Wiggins, G. A., Miljković, D., Podpečan, V., Pollak, S., Kralj, J., , Bohanec, M., Lavrac, N., Urbančič, T., Van Der Velde, F., and Battersby, S. (2019) Conceptual Representations for Computational Concept Creation, *ACM Comput. Surv.*, 52 (1) (Q1)
7. Francisco, V., Hervás, R., Méndez, G., and Galván, P. (2018) Exploring the Potential of Concept Associations for the Creative Generation of Linguistic Artifacts: a Case Study with Riddles and Rhetorical Figures, *Frontiers in Psychology*, 9 (Q2)
8. Oliveira, H.G., Hervás, R., Díaz, A., Gervás, P. (2017) Multilingual extension and evaluation of a poetry generator. *Natural Language Engineering*. 23(6) (Q4)
9. Bautista, S., Hervás, R., Gervás, P., Rojo, J. (2017) A Model for the Universal Access to Numerical Information. *Universal Access in the Information Society Journal*. 16 (1) (Q3)
10. Hervás, R., Arroyo, J., Francisco, V., Peinado, F., and Gervás, P. (2016) Influence of Personal Choices on Lexical Variability in Referring Expressions. *Natural Language Engineering*. 22 (2) (Q3)
11. Hervás, R., Francisco, V., and Gervás, P. (2013) Assessing the influence of personal preferences on the choice of vocabulary for natural language generation. *Information, Processing & Management*. 49 (4) (Q2)
12. Francisco, V., Hervás, R., Peinado, P., and Gervás, P. (2012) EmoTales: creating a corpus of folk tales with emotional annotations. *Language Resources and Evaluation*. 46 (3) (Q4)
13. Peinado, P., Francisco, V., Hervás, R., and Gervás, P. (2010) Assessing the Novelty of Computer-Generated Narratives Using Empirical Metrics. *Minds & Machines*. 20 (4). 565-588 (Q4)
14. Gervás, P., Díaz-Agudo, B., Peinado, F., Hervás, R. (2005) Story Plot Generation based on CBR. *Knowledge-Based Systems*, 18 (4-5) (Q3)

CONFERENCES WITH RANKING A IN THE CORE INDEX:

1. Hervás, R., Francisco, V., Méndez, G., and Bautista, S. (2019) A User-Centred Methodology for the Development of Computer-Based Assistive Technologies for Individuals with Autism. International Conference on Human-Computer Interaction (INTERACT 2019), Cyprus.
2. Rello, L., Bautista, S., Baeza-Yates, R., Gervás, P., Hervás, R., Saggion, H. (2013) How One half or 50%? An eye-tracking study of number representation readability. 14th IFIP Conference on Human-Computer Interaction (INTERACT 2013), South Africa.
3. Bautista, S., Hervás, R., Gervás, P., Power, R., Williams, S. (2011) How to Make Numerical Information Accessible: Experimental Identification of Simplification Strategies. 13th IFIP TCI3 Conference on Human-Computer Interaction (INTERACT 2011), Portugal.
4. Hervás, R., Finlayson, M.A. (2010) The Prevalence of Descriptive Referring Expressions in News and Narrative. ACL (Short Papers).

C.2. PHD-Thesis

1. Un modelo computacional para la simplificación automática de expresiones numéricas. Susana Bautista Blasco. Facultad de Informática, Universidad Complutense de Madrid. 22 de mayo de 2015, Sobresaliente Cum Laude. Co-director: Pablo Gervás Gómez-Navarro. Mención de Doctorado Europeo

Supervised Bachelor's Thesis: 21

Supervised Master's Thesis: 10

C3. Others

Research stays

- Massachusetts Institute of Technology (MIT), Computer Science and Artificial Intelligence Lab (CSAIL). Boston, USA.
Invited researcher 07/07/12 - 21/07/2012
- Massachusetts Institute of Technology (MIT), Computer Science and Artificial Intelligence Lab (CSAIL). Boston, USA.
Postdoctoral fellowship 01/08/09 - 31/01/2010
- Universidad de Coimbra, Centro de Informática y Sistemas (CISUC). Coimbra, Portugal.
Predoctoral fellowship 10/01/07 - 16/02/2007
- Universidad de Coimbra, Centro de Informática y Sistemas (CISUC). Coimbra, Portugal.
Predoctoral fellowship 11/01/06 - 11/02/2006

R+D activities

Member of the organization committee of the following events:

- 5th International Joint Workshop on Computational Creativity (IJWCC 2008)
- Congreso de la Sociedad Española para el Procesamiento del Lenguaje Natural (SEPLN '13)
- The First Annual Contact Forum of the PROSECCO network
- ICCBR-15 Workshop on Experience and Creativity (Workshop Chair)
- 7th International Workshop on Computational Creativity, Concept Invention, and General Intelligence (C3GI 2017)
- INLG-18 Workshop on Computational Creativity in Language Generation (Workshop Chair)
- ECAI 2020 Workshop on Intelligent Information Processing and Natural Language Generation (Workshop Chair)
- INLG 2023 International Conference on Natural Language Generation (SIGGEN Exec)

Member of the program committee of the following events:

- International Conference on Computational Linguistics (Coling)
- Predicting and Improving Text Readability for target reader populations workshop (PITR)
- Natural Language Processing for Improving Textual Accessibility workshop (NLP4ITA)
- Text Simplification, Accessibility and Readability Workshop (TSAR)

- European Workshop on Natural Language Generation (ENLG)
- Congreso de la Sociedad Española para el Procesamiento de Lenguaje Natural (SEPLN)
- European Association for Computational Linguistics (EACL)
- International Natural Language Generation Conference (INLG)
- International Conference on Computational Creativity (ICCC)
- International Conference on Empirical Methods in Natural Language Processing (EMNLP)
- AAAI Conference on Artificial Intelligence (AAAI)
- International Conference on Software Development and Technologies for Enhancing Accessibility and Fighting Info-Exclusion (DSAI)

Part D. List of Projects

D.1. Research projects

PARTICIPATION AS PRINCIPAL INVESTIGATOR:

1. IDiLyCo: Inclusión Digital, Lenguaje Natural y Comunicación. Ministerio de Ciencia e Innovación, P. N. de I+D+i orientada a los Retos de la Sociedad (TIN2015-66655-R). 01/01/2016 – 31/12/2019. Financiación 83000€

PARTICIPATION IN EUROPEAN PROJECTS:

1. Promoting the Scientific Exploration of Computational Creativity (PROSECCO). VII Programa Marco. Grant agreement 600653 (2013-2016).
2. The What-If Machine (WHIM). VII Programa Marco. Grant agreement 611560 (2013-2016).
3. Concept Creation Technology (ConCreTe). VII Programa Marco. Grant agreement 611733 (2013-2016).

PARTICIPATION IN NATIONAL PROJECTS:

1. Composición Automática de Narrativas Personales como Apoyo a la Terapia Ocupacional basada en Reminiscencia (CANTOR). Plan Nacional / Ministerio de Ciencia, Innovación e Universidades. PID2019-108927RB-I00 (2020-2024).
2. ComunicArte: Comunicación efectiva a través de la realidad virtual y las tecnologías educativas. Fundación BBVA (2018-2019).
3. Red de Excelencia en Tratamiento Inteligente de Datos y Generación de Lenguaje Natural. Redes de excelencia 2017, Programa Estatal de Fomento de la Investigación Científica y Técnica de Excelencia. TIN2017-90773-REDT (2018-2020).
4. NOVA: Navegación basada en Ontologías mediante la Verbalización de mensajes de Ayuda. P. N. de I+D+i (Proyectos de Investigación Fundamental no orientada). TIN2009-14659-C03-01 (2010-2012)
5. Galante: Generación de lenguaje natural para textos con emociones. P. N. de investigación (Tecnologías de la información). TIN2006-14433-C02-01 (2006-2009)
6. Inredis: Interfaces de relación con el entorno para personas con discapacidad. Programa CENIT (CEN-2007-2011).

D.2. Contracts, technological or transfer merits

1. Inredis: Interfaces de relación con el entorno para personas con discapacidad. Ministerio de Industria, Turismo y Comercio. Programa CENIT (CEN-2007-2011). Subvención: 50.000 € para la UCM (23.615.505 € en total). IP: José Ángel Martínez Usero. Technosite (Fundosa Teleservicios S.A.) Participation: Researcher