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ESTATAL DE
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CURRICULUM VITAE (CVA)

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

CV date	March 9th 2022
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Part A. PERSONAL INFORMATION

First name	María Inés		
Family name	TORRES BARAÑANO		
Gender (*)		Birth date (dd/mm/yyyy)	
Social Security, Passport, ID number			
e-mail	manes.torres@ehu.eus	URL Web	
Open Researcher and Contributor ID (ORCID) (*)	orcid.org/0000-0002-1773-3214		

(*) Mandatory

A.1. Current position

Position	Full Professor of Computer Science		
Initial date	4/10/2011		
Institution	Universidad del País Vasco UPV/EHU		
Department/Center	Electricidad y Electrónica	Facultad de Ciencia y Tecnología	
Country	Spain	Phone Number	696279411
Key words	speech and natural language processing, emotion identification machine learning, spoken dialog systems, neural networks.		

A.2. Previous positions (research activity interruptions, art. 14.2.b)) (last 10 years)

Period	Position/Institution/Country/Interruption cause
Oct.-Dec. 2019 /Sept.2021-Feb.2022	Full Prof.- UPV/EHU-Spain Surgery /Work accident

A.3. Education

Degree/Master/PhD	University	Date
Physics Degree	Sciences Faculty - Universidad del País Vasco– UPV/EHU	June 1981
Graduate Thesis	Sciences Faculty - Universidad del País Vasco– UPV/EHU	June 1982
PhD Physics - Computer Science	Sciences Faculty - Universidad del País Vasco– UPV/EHU	December 1990

Part B. CV SUMMARY (max. 5000 characters, including spaces)

Professor M. Inés Torres received her PhD in Physics from the UPV/EHU in 1990, including an internship at the Centre National d'Études des Télécommunications in Lanion (France) in 1988. She was a visiting researcher at the Polytechnic University of Valencia (Spain) in 1991 and 1992. Prof. Torres was a member of the board of the Spanish Association of Pattern Recognition (IAPR), 1995 to 2008. She is currently a Full Professor of Computer Science, ranked in the highest excellent level, at the UPV/EHU where she has also held several academic management positions. Professor M. Inés

Torres was a visiting Faculty at the Language Technologies Institute in Carnegie Mellon University in 2012, then a visitor in 2013. She was also a visiting Professor at the University of California granted by the Spanish Minister and the Fulbright program, in 2018.

She founded the Speech-Interactive research group in 1990, which she has been leading since then. In addition, she has also held several positions of academic management at the UPV/EHU. She has supervised 11 PhD thesis, which received the maximum qualifications and mentions, and currently supervises two more. She has also supervised twenty two Master theses and a number of graduate theses.

Prof. M. Inés Torres has a multi-disciplinary academic and industrial experience in the fields of Pattern Recognition, Deep learning, Speech Processing, which covers Emotional Speech Identification, Recognition and Understanding, Natural Language Processing, Machine translation, Spoken Dialogue Systems and Machine Learning, which includes Online and transfer Learning as well as Zero and One shot. In addition, she has also a great experience in the design, acquisition and annotation of speech and linguistic resources to implement data-driven approaches, in English, Spanish and Basque.

Professor M. Inés Torres has leaded fourteen national projects and seventeen research contracts with technology centres and companies, being one of them awarded as the best annual action for research transference to companies by the Euskoiker Foundation. She has published more than one hundred and seventy works in journals and international conferences in her field of expertise, about thirty more in national ones and has contributed as editor of four international books. She has served on various editorial and research steering boards as coordinator/technical leader/invited expert. In addition, she has contributed to organise reputed international conferences. Professor M. Inés Torres also serves as external expert evaluator of many national and European calls as well as for other European National Research Agencies, mainly in research and Innovation actions. She has participated in three European projects and coordinated one of them, the H2020 SC1-PM-15 EMPATHIC project (grant 769872) (www.empathic-project.eu). She now leads the partner UPV/EHU in the H2020-MSCA-RISE MENHIR action (grant 823907) (<https://menhir-project.eu>)

Prof. M. Inés Torres has five six-years periods of research positively evaluated by the CNEAI, i.e. the Spanish National Agency, which is the maximum achievable. She also got the A2 level (maximum level of excellence) positively evaluated by UNIQUAL, i.e. the Basque Agency for Professor quality accreditation, in 2016.

Part C. RELEVANT MERITS

C.1. Publications (a selection of ten from the last 10 years)

- 1.- Eneko Ruiz, María Inés Torres, Arantza del Pozo (2023): "Question answering models for human-machine interaction in the manufacturing industry", *Computers in Industry*, Volume 151, 103988; Elsevier, JCR (2022) 10.00 Q1
- 2.- Alain Vázquez, Asier López-Zorrilla, Javier Mikel Olaso and M. Inés Torres (2023): "Dialogue Management and Language Generation for a Robust Conversational Virtual Coach: Validation and User Study". *Sensors*, vol 23, issue 3, MDPI, JCR (2021) 3.847 Q1
- 3.- Mikel deVelasco-Vázquez, Raquel Justo, Asier López-Zorrilla and M. Inés Torres (2023): "Analysis of deep learning-based decision making in an emotional spontaneous speech task". *Applied Sciences*, vol 13, issue 2, 980. MDPI, 2023.JCR (2021) 2.838 Q2
- 4.- A.López-Zorrilla and M. Inés Torres (2022): "A multilingual neural coaching model with enhanced long-term dialogue structure" *ACM Transactions on Interactive Intelligent Systems* Vol 12 issue 2, ACM Association for Computing Machinery JCR (2020) 2.137 Q3
- 5.- Mikel deVelasco-Vázquez, Raquel Justo, and M. Inés Torres (2022): "Automatic Identification of Emotional Information in Spanish TV Debates and Human-Machine Interactions" *Applied Sciences*, Vol 12, number 4, 1902, <https://doi.org/10.3390/app12041902> JCR (2020) 2.679 Q2
- 6.- L. Ben Letaifa and M. Inés Torres (2021): "Perceptual borderline for balancing multi-class spontaneous emotional data", *IEEE Access*, Vol 9, pp 55939-55954 E-ISSN: 2169-3536 JCR (2019) 3.745 Q1
- 7- R. Justo, L. Ben Letaifa, C. Palmero at al. (2020): "Analysis of the Interaction between Elderly People and a Simulated Virtual Coach", *Journal of Ambient Intelligence and Humanized Computing*, Vol 11, N 12 pp 6125-6140 E-ISSN:1868-5145 JCR (2020) 7,104 Q1
- 8- M. Serras, M.I. Torres and A. Del Pozo (2019): User aware dialogue management policies over attributed bi-automata, *Pattern Analysis and Applications*, vol 22, issue 4, pp 1319-1330, Springer, JCR (2019) 1.512 Q3

- 9.- R. Justo, J. M. Alcaide, M.I. Torres., M. Walker (2018): Detection of sarcasm and nastiness: new resources for Spanish, *Cognitive Computation*, vol 10, issue 6, pp 1135-1151, JCR (2018) 4.287 Q1
- 10.- A. López-Zorrilla, M. deVelasco, S. Cenceschi, M.I. Torres. (2018): "Corrective Focus Detection in Italian Speech Using Neural Networks, *Acta Polytechnica Hungarica* Vol. 15, No. 5, pp 109-127, JCR (2018) 1.286 Q3

C.2. Congress: *Eight selected publications in conferences in the last three years*

Asier López Zorrilla, Alain Vázquez and M.I. Torres (2023): "Batch-level GANs to promote dialogue response variety" *International Workshop Series on Spoken Dialogue Systems Technology (IWSDS)*, Los Angeles, 21st February

A. López Zorrilla, María Inés Torres and Heriberto Cuayáhuil (2021): "Audio Embeddings Help to learn better Dialogue Policies" *IEEE Automatic Speech Recognition and Understanding Workshop (ASRU)*, Cartagena de Indias, Colombia, December 13-17 2021

Javier M. Olaso, Alain Vázquez, Jofre Tenorio-Laranga et al. (2021): "The EMPATHIC Virtual Coach: a demo", *ACM International Conference on Multimodal Interaction (ICMI '21)*, Montreal, Canada, October 18-22, 2021

Claudia Greco, Carmela Buono, Pau Buch et al (2021): "Emotional Features of Interactions with Empathic Agents" *IEEE ICCV 2021 Understanding Social Behavior in Dyadic and Small Group Interactions Workshop*, Virtual, October 11-17

Z.Callejas, D. Griol, K. Benghazi, M. Noguera, G. Chollet, M. Inés Torres, and A. Esposito (2020): "Measuring and Fostering Engagement with Mental Health e-Coaches", *ACM International Conference on Multimodal Interaction (ICMI '20 Companion)*, Online, October

H. Candello, C. Munteanu, Leigh Clark, J. Sin, M. I. Torres, M. Porcheron, C. M. Myers, B. R. Cowan, J.I E. Fischer, S. Schlägl, C. Murad, S.Reeves (2020): "CUI@CHI: Mapping Grand Challenges for the Conversational User Interface Community" *ACM CHI Conference on Human Factors in Computing Systems*, Honolulu HI USA April, 2020

C. Munteanu, L. Clark, B. R. Cowan et al. (2020): "CUI: Conversational User Interfaces: A Workshop on New Theoretical and Methodological Perspectives for Researching Speech-based Conversational Interactions" *ACM Int. Conf. on Intelligent User Interfaces (IUI)*, Italy

M. I. Torres, J. M. Olaso, C. Montenegro et al. (2019): "The EMPATHIC Project: Mid-term Achievements" *Proc. of the ACM International Conference on Pervasive Technologies Related to Assistive Environments (PETRA)* pp 629-638 ACM digital library, Rhodes, June.

Ten selected invited conferences in the last ten years.

M. Inés Torres, Panel: "Beyond Text: Inclusive Human Communication with Language Technology" Organised by Kalika Bali, Microsoft research Labs India EMNLP 2023, December 6th-10th, Sentosa, Singapore

M. Inés Torres: "Speech aware Dialogue management" *NII Shonan meeting on Natural Interaction with Humanoid Robots*. Japan, January 23th, 2023

M. Inés Torres: "Speech Interactive" AIRST, Tokio, Japan, January 27th, 2023

M. Inés Torres, Conversational Coaching to improve the well-being of the older adults. *EU-Japan Hybrid Conference on Virtual Coaches for Smart Aging* 14th - 15th July 2022 AIRC Tokyo Waterfront (Annex) 11F, Japan

M. Inés Torres: "EU initiatives about conversational systems for e-health" *International Doctoral Summer School in Conversational Systems for Mental e-health*. H2020 MSCA-RISE MENHIR, Online, 5th - 9th October 2020

M. Inés Torres: "EMPATHIC human - machine interaction" *Speech Morphing Company*; San José-California (USA) July 2018

M. Inés Torres: "EMPATHIC Coaching approach for well-being" *University of California - Santa Cruz* , June 13th 2018

M. Inés Torres: “Interactive Pattern Recognition”, International Computer Science Institute (ICSI), Berkeley CA (USA), 8 April 2013

M. Inés Torres: “Interactive Pattern Recognition and selected Applications for Speech Technologies” *Microsoft Research Labs*, Mountain View CA (USA), 12 April 2013

M. Inés Torres: “Human Language Technologies in Basque Language” *School of Computer Science. Carnegie Mellon University*. Pittsburgh, PA (USA), 29 February 2012

C.3. Research projects (a selection)

BEWORD: “Descubriendo el significado y la intención más allá de la palabra hablada: hacia un entorno inteligente para abordar los documentos multimedia”. Ministerio de Ciencia e Innovación (PID2021-126061OB-C42) Universidad Politécnica de Valencia (coordinador), Universidad de Zaragoza, Universidad del País Vasco, Universidad Politécnica de Madrid
Investigadoras principales: Raquel Justo y M. Inés Torres. Septiembre 2022 - Agosto 2024

BERREKIN “Operadores en el Circuito para Interacción en Lenguaje Natural en Entornos de Fabricación Avanzada” ELKARTEK program, SPRI, Consejería de Industria del Gobierno Vasco. **IP of the UPV/EHU partner 2023-2024**. Industrial research.

CITA GO-ON: Multimodal intervention model for a person-centered, digital, intergenerational and cost-effective prevention of dementia to guide strategic policies that face the demographic challenges of the progressive aging. National Strategic R+D+I public-private collaboration, **NextGeneration EU** (PLEC2021-008171) **IP UPV/EHU partner 2021-23**

“EKIN - Towards natural language interaction with industrial production machines”. ELKARTEK program, SPRI, Consejería de Industria del Gobierno Vasco. **IP of the UPV/EHU partner 2020-2022**. Industrial research.

AMIC-PC: Affective multimedia analytics with inclusive and natural communication. Proof of Concept National Grant by MICIN (PDC2021-120846-C43). **IP UPV/EHU partner 2021-2022**

MENHIR, Mental health monitoring through interactive conversations. European Commission **H2020-MSCA-RISE2018** (grant 823907). **IP of the UPV/EHU partner Jan2019-Dec2023**

AMIC: Affective multimedia analytics with inclusive and natural communication. National grant by MINECO (TIN2017-85854-C4-3-R). Coord. project; **IP UPV/EHU partner 2018-2020**

EMPATHIC Expressive, Advanced Virtual Coach to Improve Independent Healthy-Life-Years of the Elderly. **H2020 SC1 RIA** (grant 769872) **Coordinator** of all the consortium 2017-2021

ASLP-MULAN: Audio, speech and language processing for multimedia analytics; National grant MINECO (TIN2014-54288-C4-4-R) Coord. project, **IP UPV/EHU partner, 2015-2018**

vAssist, Voice Controlled Assistive Care and Communication Services for the Home. European Ambient Assisted Living Joint Programme (ICT for ageing well)(AAL-2010-3-106). **IP of the UPV/EHU team. 2014- 2015**

TIMPANO Technology for Complex human-machine conversational interaction with dynamic learning, Spanish National Grant by Mineco (TIN2011-28169-C05-04). Coordinated project. **IP of the UPV/EHU partner; Dic 2011- Jun2015**.

C.4. Contracts, technological or transfer merits (selection last 10 years)

Companies: IBERMATICA, GUREAK, MERKATU and NATURALVOX **Contract:** Emotional features for the EMPHASIS product (Empowering decision making with higher productivity), **IP of the contract. 2021-2023**

Company: ALCAD Electronics. **Contract:** Emotional features for the ORKESTA product (Comprehensive Solution for the Orchestration of Services and Healthcare at Home, **IP of the contract 2021-2023**

Company: Vicomtech. **Contract:** Dialogue systems consulting. **Contract IP 2016-2017**

Company: Hispavista. **Contract:** New Hispa Vista's web portals based on 3.0 and Semantic Web technologies. Member of the UPV/EHU team Sept 2011- Dec 2014