

CURRICULUM VITAE ABREVIADO (CVA)

Part A. PERSONAL INFORMATION

Name	Arturo		
Surname	Montejo Ráez		
Gender	Male		
ID card	26026531F	Date of birth	02/10/1975
Email address	amontejo@ujaen.es		
Researcher ID	D-3387-2009		
Código Orcid	0000-0002-8643-2714		

A.1. Current Professional Situation

Position	Associate Professor (Tenured)		
Start date	2018		
Organization/Institution	Universidad de Jaén		
Department/Center	Centro de Estudios Avanzados en TIC (CAETIC)		
Country	Spain	Telephone	953 212 882
Keywords	Natural Language Processing, Artificial Intelligence		

A2. Previous Professional Situations

1999-2000	Ayudante de Escuela Universitaria / Universidad de Jaén
2000-2002	Beca CDTI de Formación de Personal Investigador en el Extranjero / CERN (Suiza)
2002-2004	Doctoral Student / CERN (Suiza)
2004-2006	Ayudante / Universidad de Jaén
2006-2008	Profesor Colaborador / Universidad de Jaén
2008-2013	Profesor Contratado Doctor / Universidad de Jaén

A.3 Academic Education

Title	University/Country	Year
PhD in Computer Science	Universidad de Granada / Spain	2006
Engineering in Computing Studies	Universidad de Granada / Spain	1999
Technical Engineering in Management Computing Studies	Universidad de Jaén / Spain	1997

Part B. CV SUMMARY

Arturo Montejo Ráez holds a PhD in Computer Science with European mention from the University of Granada in 2006. He is a lecturer and researcher at the University of Jaén (Spain) and member of the SINAI research group in Intelligent Information Access Systems at the University of Jaén, where he is Assistant Professor. He is member of Advisory Board of the Spanish Society of Natural Language Processing (SEPLN). He is member of the Spanish Delegation for CLARIN ERICs as Scientific Expert and member of the Spanish Research Network CLARIAH-ES. He is also member of the Management Committee of the European COST Action "Digital Mental Health for Young People (YouthDMH)" (CA23153).

He participates in three national projects currently. He has participated as a researcher in 19 national and one European project. He has been principal investigator of 2 regional and 2 national projects. He is also CTO and one of the co-founders of the startup Yottacode S.L that obtained, in 2018, a funding through the European SME Instrument call for 50.000€.

He has been recognized with three six-year research periods evaluation system and one six-year technology-transfer period by the Spanish academic. Regarding scientific production, the numbers are 15 publications in JCR Q1/Q2 (23 JCR-index papers in total), 119 indexed publications (Scopus), a Scopus H index of 18 and a total number of citations of 1,382. He is currently supervising six PhD students.

His AI research focuses on machine learning for language models. He pioneered deep neural networks in this area and currently investigates bias in large language models, text simplification, and conversational AI for detecting and treating disorders using cognitive-behavioral therapies. His interdisciplinary work involves collaborations with experts in linguistics, psychology, sociology, and biology.

Part C. LIST OF MOST RELEVANT CONTRIBUTIONS

C.1. Publications

Vallecillo, María Estrella; Plaza, Flor Miriam; **Montejo-Ráez, Arturo**. (2025). Combining profile features for offensiveness detection on Spanish social media. Expert Systems With Applications. 272-126705. ISSN 0957-4174. <https://doi.org/10.1016/j.eswa.2025.126705> - JCR Q1

Ortiz-zambrano, Jenny Alexandra; Espin-riofrio, César; **Montejo-Ráez, Arturo**. (2025). Deep Encodings vs. Linguistic Features in Lexical Complexity Prediction. Neural Computing and Applications. 37, pp.1171-1187. ISSN 1433-3058. <https://doi.org/10.1007/s00521-024-10662-9> - JCR Q2

Montejo-Ráez, A., Molina-González, M. D., Jiménez-Zafra, S. M., García-Cumbreras, M. A., García-López, L. J. (2024). A survey on detecting mental disorders with natural language processing: Literature review, trends and challenges. Computer Science Review, Volume 53, ISSN 1574-0137. <https://doi.org/10.1016/j.cosrev.2024.100654> - JCR Q2

Vallecillo-Rodríguez, M. E., Romero, M. V. C., De Castro, I. C., **Montejo-Ráez, A.**, & Martín-Valdivia, M. T. (2024). CONAN-MT-SP: A Spanish Corpus for Counternarrative Using GPT Models. In Proceedings of the 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING 2024) (pp. 3677-3688). <https://aclanthology.org/2024.lrec-main.326> - GGS Class A

Mármol-Romero, A. M., Martínez-Muñoz, A., Plaza-Del-Arco, F. M., Molina-González, M. D., Martín-Valdivia, M. T., Ureña-Lopez, L. A., & **Montejo-Ráez, A.** (2024). MentalRiskES: A New Corpus for Early Detection of Mental Disorders in Spanish. In Proceedings of the 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING 2024) (pp. 11204-11214). <https://aclanthology.org/2024.lrec-main.978> - GGS Class A

Mármol-Romero, A. M., García-Vega, M., García-Cumbreras, M. Á., & **Montejo-Ráez, A.** (2024). An Empathic GPT-Based Chatbot to Talk About Mental Disorders With Spanish Teenagers. International Journal of Human–Computer Interaction, 1–17. <https://doi.org/10.1080/10447318.2024.2344355> - JCR Q2

Vallecillo-Rodríguez, M. E., **Montejo-Ráez, A.**, & Martín-Valdivia, M. T. (2023). Automatic counter-narrative generation for hate speech in Spanish. Procesamiento del Lenguaje

Natural, 71, 227-245. <http://journal.sepln.org/sepln/ojs/ojs/index.php/pln/article/view/6556> - JCR Q2

Mármol-Romero, A. M., Moreno-Muñoz, A., Plaza-del-Arco, F. M., Molina-González, M. D., Martín-Valdivia, M. T., Ureña-López, L. A., & **Montejo-Raéz, A.** (2023). Overview of MentalRiskES at IberLEF 2023: Early Detection of Mental Disorders Risk in Spanish. *Procesamiento del Lenguaje Natural*, 71.

<http://journal.sepln.org/sepln/ojs/ojs/index.php/pln/article/view/6564> - JCR Q2

Garrido-Muñoz, I., Martínez-Santiago, F., & **Montejo-Ráez, A.** (2023). MarIA and BETO are sexist: evaluating gender bias in large language models for Spanish. *Language Resources and Evaluation*, 1-31. <https://doi.org/10.1007/s10579-023-09670-3> - JCR Q2

Martínez-Santiago, F.; Torres-García, A.; Montejo-Ráez, A.; Gutierrez-Palma, N. (2023). The impact of reading fluency level on interactive information retrieval. *Universal Access in the Information Society*. 22, pp. 51-67. <https://doi.org/10.1007/s10209-021-00826-y> - JCR Q3

Ortiz-zambrano, Jenny; Espin-riofrio, César; **Montejo-Ráez, Arturo**. (2022). Transformers for Lexical Complexity Prediction in Spanish Language. *Procesamiento del Lenguaje Natural*. pp. 277-188. <http://journal.sepln.org/sepln/ojs/ojs/index.php/pln/article/view/6438>

Garrido-Muñoz, I., **Montejo-Ráez, A.**, Martínez-Santiago, F., & Ureña-López, L. A. (2021). A survey on bias in deep NLP. *Applied Sciences*, 11(7), 3184.

<https://doi.org/10.3390/app11073184> - JCR Q2, 165 citations

Martínez-Santiago, F., **Montejo-Ráez, A.**, & García-Cumbreras, M. Á. (2018). Pictogram tablet: a speech generating device focused on language learning. *Interacting with Computers*, 30(2), 116-132. <https://doi.org/10.1093/iwc/iwx022> - JCR Q4

Martínez-Santiago, F.; García-Cumbreras, M. Á.; **Montejo-Raez, A.**; Díaz-Galiano, M. C. (2015). A method based on rules and Machine Learning for Logic Form identification in Spanish. *Natural Language Engineering*. pp. 1-23.

<https://doi.org/10.1017/S1351324915000297> - JCR Q4

Montejo-Ráez, A., Martínez-Cámara, E., Martín-Valdivia, M. T., & Ureña-López, L. A. (2014). Ranked wordnet graph for sentiment polarity classification in twitter. *Computer Speech & Language*, 28(1), 93-107. <https://doi.org/10.1016/j.csl.2013.04.001> - JCR Q2, 192 citations

Montejo-Raez, Arturo; Díaz-Galiano, Manuel Carlos; Martínez-Santiago, Fernando; Ureña-López, L. Alfonso. (2014). Crowd Explicit Sentiment Analysis. *Knowledge-Based Systems*. 69, pp. 134-139. <https://doi.org/10.1016/j.knosys.2014.05.007> - JCR Q1

Montejo-Raez, Arturo; Martínez-Cámara, Eugenio; Martín-Valdivia, M^a Teresa; Ureña-López, L. Alfonso. (2014). A knowledge-based approach for polarity classification in Twitter. *Journal of the American Society for Information Science and Technology*. 65, pp. 414-425. <https://doi.org/10.1002/asi.22984> - JCR Q4

C.2. Projects

PID2021-122263OB-C21. CONSENSO: CONtent for Semantic Nice and SOcial Communication through NLP. Plan nacional I+D+I. 01/09/2022-31/08/2025. PI: L. Alfonso Ureña y M^a Teresa Martín Valdivia. 223.003,00 EUR. Researcher.

TED2021-130145B-I00. MODERATES: MODERAtion of ConTEnts in Social networks using Language Technologies. Plan Estatal de Investigación Científica y Técnica y de Innovación

2021-2023. Ministerio de Ciencia e Innovación. PI: L. Alfonso Ureña y M^a Teresa Martín Valdivia. 295.205,00 EUR. Researcher.

PDC2022-133146-C21. Social Fairness: Assessing fairness in digital media. Subtítulo: SocialTox: Assessing toxicity in digital media. Ministerio de Ciencia e Innovación. 2022-2024. 54.855,00 EUR. Researcher.

SUBV-00016. PRECOM: Detección PREcoz de COMportamientos de riesgo de adicción al juego. Ministerio de Consumo. 2022-2023. 130.560,00 EUR. As **Project leader**.

PY20_00956. Big Hug: Artificial intelligence for the protection of digital societies. Agencia Andaluza del Conocimiento. Consejería de Transformación Económica, Industria, Conocimiento y Universidades.. 2021-2023. 82.316 EUR. As **Project leader**.

1380939. WeLee: Web Legible para todos mediante simplificación y enriquecimiento de textos. Consejería de Economía y Conocimiento-Junta de Andalucía/ Fondos Europeos de Desarrollo Regional-Unión Europea. 2021-2023. 42.195,78 EUR. As **Project leader**.

RED2022-134527-E. CLARIAH-ES: RED ESTRATEGICA PARA LA INTEGRACION EN LAS INFRAESTRUCTURAS EUROPEAS DE INVESTIGACION EN CIENCIAS SOCIALES Y HUMANIDADES. Ministerio de Ciencia e Innovación. 60.000 €

RTI2018-094653-B-C21. Tecnologías del lenguaje humano para entidades digitales vivas (LIVING-LANG). MINISTERIO DE CIENCIA, INNOVACIÓN Y UNIVERSIDADES. 2019-2021. 146.047,00 EUR. Researcher.

TIN2012-38536-C03-01. ATTOS: ANALISIS DE TENDENCIAS Y TEMATICAS A TRAVES DE OPINIONES Y SENTIMIENTOS. Ureña-López, L. Alfonso (Universidad de Jaén). 2013-2015. 71.680 EUR. Researcher.

2011/00261. A FLEXIBLE INTERACTIVE READING SUPPORT TOOL. EUROPEAN COMMISSION. Martín-Valdivia, M^a Teresa (Universidad de Jaén). 2011-2014. 367400,00 EUR. Researcher.

C.4. Technology Transfer

Contract: Prestación de servicios de investigación y asesoramiento científico. Axesor Conocer para Decidir, S. A. Ureña-López, L. Alfonso y **Arturo Montejo Ráez** (Universidad de Jaén). 2023-2024. 118.964,68 EUR.

Contract: Detección, extracción de entidades y relaciones en documentos mercantiles. Axesor Conocer para Decidir, S.A. Ureña-López, L. Alfonso (Universidad de Jaén). 2019-2021. 96.324,26 EUR

Contract: Fundación Robert Bosch México. Fundación Robert Bosch Mexico. 2018. EUR. **Arturo Montejo-Ráez**. 10.000

Intellectual property (Software): **Arturo Montejo Ráez** and others; 2309205362387-3P7X2M; Prevemental: App de control parental para la detección precoz de trastornos mentales en redes sociales; 20-sep-2023

Intellectual property (Software): **Arturo Montejo Ráez** and others; 2309205366545-9PBRF4; Chatbot BigHug; 20-sep-2023