

**Parte A. DATOS PERSONALES**
**Fecha del CVA**

07/02/2023

Nombre y apellidos	FRANCISCO JAVIER ORTEGA RODRÍGUEZ		

**A.1. Situación profesional actual**

Organismo	Universidad de Sevilla		
Dpto./Centro	Lenguajes y Sistemas Informáticos		
Dirección	Sevilla, Andalucía, España		
Categoría profesional	Profesor titular de universidad	Fecha inicio	2019
Espec. cód. UNESCO			
Palabras clave			

**A.2. Formación académica** (título, institución, fecha)

Licenciatura/Grado/Doctorado	Universidad	Año
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**A.3. Indicadores generales de calidad de la producción científica** (véanse instrucciones)

Indicador	Medida
Sexenios de investigación	2.0
Fecha del último sexenio	01/01/2021

**Parte B. RESUMEN LIBRE DEL CURRÍCULUM**

My research career started in 2006, mainly focused on Natural Language Processing (NLP), as a member of the Itálica Research Group. Currently, I am a lecturer in the Computer Languages and Systems department in the University of Seville (Spain).

At first, my research focused on NLP techniques applied to text classification. We developed a graph-based algorithm intended to solve Part-Of-Speech tagging task. Next, these ideas were applied to the computation of relevance of web pages in order to tackle the problem of detecting web spam. Later on, the algorithm was adapted with the aim of calculate trust and reputation in on-line social networks, avoiding the negative effects of malicious users behavior in this type of systems. These ideas where the basis of my PhD thesis (2012), which obtained a national award by SEPLN (Sociedad Española para el Procesamiento del Lenguaje Natural) to the best research work in the area in that year.

Since then, I am focused on further my research in this line of work, improving and applying these and other novel techniques in the processing of other types of texts (microblogging, instant messaging, etc.). In total, I have published 10 papers in relevant journals (indexed in JCR), 4 of them post-doc, and also many contributions to national and international conferences. In addition, I have participated in the organization and scientific committees of different conferences.

Another relevant aspect in my research are the stays in prestigious national and international centers. The first one was a pre-doc research stay of three months in the University of Glasgow, with the IR Group under the supervision of D. Craig Macdonald. This group is one of the most referenced in the Information Retrieval area. The second stay took place at the National Research Council of Italy (CNR) in Pisa. It was a postdoc stay with the HPC group with the supervision of D. Fabrizio Silvestri and D. Raffaele Perego, both of them also two very well considered researchers in the area. The last stay was in the "Centro de Innovación para la Sociedad de la Información" (CICEI) in the University of Las Palmas de Gran Canaria, in a collaboration with D. Antonio Ocón and D. Begoña Betancourt.

Finally, I am the main researcher of "REACT: EneRgy efficiency and pErformAnCe of data centers by smart virTuallization and deep learning event detection" a national research

project, focused on applying graph-based and NLP techniques to the optimization of datacenters from the point of view of performance and energy consumption.

Regarding my work as a teacher, I have given classes in all the Computer Science degrees in my University, and also in two master degrees: "Máster en Ingeniería del Software: Cloud, Datos y Gestión TI" and "Documentos y Libros. Archivos y Bibliotecas". Furthermore, I have supervised numerous final projects for the Computer Science degrees and masters.

## Parte C. MÉRITOS MÁS RELEVANTES (*ordenados por tipología*)

### C.1. Publicaciones

Publicación en Revista. Fernández-Cerero, Damián; Ortega-Rodríguez, Francisco Javier; Fernandez-Montes-Gonzalez, Alejandro. 2021. DISCERNER: DynamIc SeleCtion of rEsouRce maNager in hypEr-scale Cloud-Computing data centRes. Future Generation Computer Systems. 116, pp. 190-199.

Publicación en Revista. García-Vallejo, Carlos A.; Troyano-Jiménez, José A.; Enriquez De Salamanca-Ros, Fernando; Ortega-Rodríguez, Francisco Javier; Cruz-Mata, Fermin. 2020. MCFS: Min-cut-based feature-selection. Knowledge-Based Systems.

Publicación en Revista. Fernández-Cerero, Damián; Fernandez-Montes-Gonzalez, Alejandro; Ortega-Rodríguez, Francisco Javier; Jakóbik, Agnieszka; Widlak, Adrian. 2020. Sphere: Simulator of edge infrastructures for the optimization of performance and resources energy consumption. Simulation modelling practice and theory. 101, pp. 101966-

Publicación en Revista. Cotelo, Juan Manuel; Ortega-Rodríguez, Francisco Javier; Troyano-Jiménez, José A.; Enriquez De Salamanca-Ros, Fernando; Cruz-Mata, Fermin. 2020. Known by Who We Follow: A Bioclustering Application to Community Detection. IEEE Access. 8, pp. 192218-192228.

Publicación en Revista. Enriquez De Salamanca-Ros, Fernando; Cruz-Mata, Fermin; Ortega-Rodríguez, Francisco Javier; Troyano-Jiménez, José A.. 2017. Similitud español-inglés a través de word embeddings. Procesamiento del Lenguaje Natural. 59, pp. 31-38.

Publicación en Revista. Cotelo, Juan Manuel; Cruz-Mata, Fermin; Troyano-Jiménez, José A.; Ortega-Rodríguez, Francisco Javier. 2015. A modular approach for lexical normalization applied to Spanish tweets. Expert Systems With Applications. 42, pp. 4743-4754.

Publicación en Revista. Ortega-Rodríguez, Francisco Javier; Troyano-Jiménez, José A.; Cruz-Mata, Fermin; Enriquez De Salamanca-Ros, Fernando. 2015. Enriching User Reviews Through An Opinion Extraction System. Procesamiento del Lenguaje Natural. pp. 119-126.

Publicación en Revista. Cruz-Mata, Fermin; Troyano-Jiménez, José A.; Pontes-Balanza, Beatriz; Ortega-Rodríguez, Francisco Javier. 2014. ML-SentiCon: Un lexicón multilingüe de polaridades semánticas a nivel de lemas. Procesamiento del Lenguaje Natural. 53, pp. 113-120.

Publicación en Revista. Cruz-Mata, Fermin; Troyano-Jiménez, José A.; Enriquez De Salamanca-Ros, Fernando; Ortega-Rodríguez, Francisco Javier; García-Vallejo, Carlos A.. 2013. 'Long autonomy or long delay?' The importance of domain in opinion mining. Expert Systems With Applications. 40, pp. 3174-3184.

Publicación en Revista. Ortega-Rodríguez, Francisco Javier. 2013. Detection of dishonest behaviors in on-line networks using graph-based ranking techniques. 26, pp. 327-329.

### C.2. Proyectos



GOBIERNO  
DE ESPAÑA

MINISTERIO  
DE ECONOMÍA, INDUSTRIA  
Y COMPETITIVIDAD

RTI2018-098062-A-I00. Energy Efficiency and Performance of Data Centers by Smart Virtualization and Deep Learning Event Detection (REACT). MINISTERIO DE CIENCIA INNOVACIÓN Y UNIVERSIDADES. 2019-2021. 25168 EUR. Investigador Principal Consolidado.

### **C.3. Contratos, méritos tecnológicos o de transferencia**

Minería de Opiniones para Textos sobre Automóviles. INTELLIGENT INFORMATION TECHNOLOGIES, S.L.. Troyano-Jiménez, José A. (Universidad de Sevilla). 2017-2019. 5088,00 EUR.

Minería de Textos y Análisis de Redes Sociales II. Troyano-Jiménez, José A. (Universidad de Sevilla). 2015-2017. 12720 EUR.

Desarrollo de Servicios de Análisis de Campañas Publicitarias en Redes Sociales.. Troyano-Jiménez, José A. (Universidad de Sevilla). 2012-2013. 7623 EUR.

### **C.4. Patentes**