Fecha del CVA	24-04-2022

Parte A. DATOS PERSONALES

Nombre y apellidos	Antonio Plaza Miguel		
DNI/NIE/pasaporte	28950260E	Edad	47 años
Núm. identificación del investigador	Researcher ID	C-4455-2008	
	Código Orcid	0000-0002-9613-1659	

A.1. Situación profesional actual

Organismo	Universidad de Extremadura			
Dpto./Centro	Departamento de Tecnología de Computadores y Comunicaciones			
Dirección	Escuela Politécnica, Avenida Universidad s/n, 10003 Cáceres			
Teléfono	927257000	correo electrónico	aplaza@unex.es	
Categoría profesional	Catedrático de Universidad		Fecha inicio	2019
Espec. cód. UNESCO	3304			
Palabras clave	Procesamiento de imágenes, arquitectura de computadores			

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

Licenciatura/Grado/Doctorado	Universidad de Extremadura	Año
Doctor en Informática	Universidad de Extremadura	2002
Ingeniero en Informática	Universidad de Extremadura	1997

A.3. Indicadores generales de calidad de la producción científica *(véanse instrucciones)*

Antonio J. Plaza was born in Caceres, SPAIN, in March 1975. He received the Computer Engineer degree in 1997, the M.Sc. degree in 1999, and the Ph.D. degree in 2002, all in Computer Engineering. Dr. Plaza is a Full Professor with the Department of Technology of Computers and Communications, University of Extremadura, Spain, where he is the Head of the Hyperspectral Computing Laboratory (HyperComp). He has authored or co-authored more than 600 publications, including 361 journal citation report (JCR) papers (260 in IEEE journals), 25 international book chapters, and 320 peer-reviewed international conference papers (150 in IEEE conference proceedings and 60 in SPIE conference proceedings). He is a highly-cited researcher (included in the 2018, 2019, 2020 and 2021 Highly Cited Researchers List by Web of Science/Clarivate Analytics). His main research interests comprise remotely sensed hyperspectral image analysis, signal processing, and efficient implementations of large-scale scientific problems on high performance computing architectures, including commodity Beowulf clusters, heterogeneous networks of computers and clouds, and specialized computer architectures such as field-programmable gate arrays (FPGAs) or graphical processing units (GPUs).

In the following, several bibliometric indicators about the research works of Dr. Plaza are provided. These indicators were collected on April 3rd, 2022:
- Clarivate Analytics Highly cited researcher: 2018, 2019, 2020, 2021
- Google Scholar: 34236 citations, h-index: 84.
- Scopus: 610 publications, 25683 citations, h-index: 76.
- Publons: 593 publications, 22072 citations, h-index: 72, verified reviews: 398, verified editor records: 6814.
- DBLP: 308 journal articles and 179 conference and workshop papers.
- Orcid: 577 publications.
- Highest h-index in the area of Electrical & Electronic Engineering in Spain.
- Highest h-index in the area of Imaging Science & Photographic Technology in Spain.
- Highest h-index in the area of Remote Sensing in Spain.
- 4th researcher with highest h-index in the area of Computer Science in Spain.
- One of the most highly cited researchers in Spain.
- Highest h-index in the University of Extremadura.
- 20 papers labeled as “Highly Cited Papers” in Web of Science/Clarivate Analytics Essential Science Indicators (ESI).

Dr. Plaza is a Fellow of IEEE "for contributions to hyperspectral data processing and parallel computing of Earth Observation data" (elevated in 2015). He was elected as a voting member of the Administrative Committee (AdCom) of the IEEE Geoscience and Remote Sensing Society (GRSS) in 2011, and was appointed international Director of Education for GRSS (2011-2012). On January 2013 he started a three-year term as Editor-in-Chief of the IEEE Transactions on Geoscience and Remote Sensing Journal, which was extended for two years until December 2017. He served as the President of the Spanish Chapter of GRSS (2013-2016). He has been re-elected for the AdCom of GRSS for the period 2020-2022, and he currently serves as Chair of the GRSS Publications Awards Committee and Vice-Chair of the GRSS Fellow Evaluation Committee. Dr. Plaza has supervised 16 PhD dissertations on hyperspectral image analysis. He was nominated for the Excellence of Teaching Award of University of Extremadura in 2015 and 2018, and was the winner of the Excellence Teaching Award of University of Extremadura in 2019. He served as Director of Education of the IEEE Geoscience and Remote Sensing Society (2011-2012). Dr. Plaza was a General Co-Chair of Jornadas SARTECO 2019, held in Cáceres, Spain, in September 2019. He was a General Co-Chair of the Fourth IEEE International Conference on Multimedia Big Data (BigMM 2018) held in Xi'an, China, in September 2018. Dr. Plaza has served as a proposal evaluator for the European Commission (Marie Curie Actions, Engineering Panel, FP7 and Space Program, H2020), the National Science Foundation (NSF), the European Space Agency, the Belgium Science Policy, the Israel Science Foundation, and the Spanish Ministry of Science and Innovation. He has participated in the Tenure Track Selection Committee of different Universities in Italy, Spain and Australia. He has been an adjunct to AEI (Agencia Estatal de Investigación) for the evaluation of research proposals for several years.

Parte B. RESUMEN LIBRE DEL CURRÍCULUM *(máximo 3500 caracteres, incluyendo espacios en blanco)*

Antonio Plaza has been visiting researcher/professor at several institutions, including the Computational and Information Sciences and Technology Office (CISTO) at NASA's Goddard Space Flight Center, Greenbelt, Maryland; the Remote Sensing, Signal and Image Processing Laboratory (RSSIPL) at the Department of Computer Science and Electrical Engineering, University of Maryland, Baltimore County; the Microsystems Laboratory at the Department of Electrical & Computer Engineering, University of Maryland, College Park (UMCP); the AVIRIS group at NASA's Jet Propulsion Laboratory, Pasadena, California; the Telecommunications & Remote Sensing Laboratory, University of Pavia, Italy; the GIPSA-Laboratory, Grenoble Institute of Technology, Grenoble, France; the Center for Earth Observation and Digital Earth (CEODE), Institute of Remote Sensing and Digital Earth (RADI), the School of Geography and Planning, Sun Yat-Sen University, Guangzhou, China; and the Department of Electrical Engineering, Hunan University, Changsha, China, funded by the prestigious ChangJiang Scholar grant to serve as visiting professor (part-time) in 2017-2019. He was also a visiting professor with the Chinese Academy of Sciences, Beijing, China, in 2013. He has also been a visiting scholar with many Chinese universities, including Nanjing, Wuhan, Xi'an, Beijing or Shanghai.

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

C.1. Publicaciones

S. Minaee, Y. Boykov, F. Porikli, A. Plaza, N. Kehtarnavaz and D. Terzopoulos. Image Segmentation Using Deep Learning: A Survey. IEEE Transactions on Pattern Analysis and Machine Intelligence, accepted for publication, 2022 [IF(2020)=13.389].

H.-C. Li, W.-S. Hu, W. Li, J. Li, Q. Du and A. Plaza. A3CLNN: Spatial, Spectral and Multi Scale Attention ConvLSTM Neural Network for Multi-Source Remote Sensing Data Classification. IEEE Transactions on Neural Networks and Learning Systems, vol. 33, no. 2, pp. 747-761, February 2022 [IF(2020)=10.451].

J. M. Haut, M. E. Paoletti, S. Moreno-Alvarez, J. Plaza, Juan A. Rico-Gallego and A. Plaza. Distributed Deep Learning for Remote Sensing Data Interpretation. Proceedings of the IEEE, vol. 109, no. 8, pp. 1320-1349, August 2021 [IF(2020)=10.961].

Z. Wu, J. Sun, Y. Zhang, Y. Zhu, J. Li, A. Plaza, J. A. Benediktsson and Z. Wei. Scheduling-Guided Automatic Processing of Massive Hyperspectral Image Classification on Cloud Computing Architectures. IEEE Transactions on Cybernetics, vol. 51, no. 7, pp. 3588-3601, July 2021 [IF(2020)=11.448].

C. Liu, J. Li, L. He, A. Plaza, S. Li and B. Li. Naive Gabor Networks for Hyperspectral Image Classification. IEEE Transactions on Neural Networks and Learning Systems, vol. 32, no. 1, pp. 376-390, January 2021 [IF(2020)=10.451].

N. He, L. Fang, S. Li, J. Plaza and A. Plaza. Skip-Connected Covariance Network for Remote Sensing Scene Classification. IEEE Transactions on Neural Networks and Learning Systems, vol. 31, no. 5, pp. 1461-1474, May 2020 [IF(2020)=10.451].

M. E. Paoletti, J. M. Haut, J. Plaza and A. Plaza. Deep Learning Classifiers for Hyperspectral Imaging: A Review. ISPRS Journal of Photogrammetry and Remote Sensing, vol. 158, pp. 279-317, December 2019 [IF(2019)=7.319].

M. E. Paoletti, J. M. Haut, J. Plaza and A. Plaza. A New Deep Convolutional Neural Network for Fast Hyperspectral Image Classification. ISPRS Journal of Photogrammetry and Remote Sensing, vol. 145, Part A, pp. 120-147, November 2018 [IF(2018)=6.942].

J Li, J. A. Benediktsson, B. Zhang, T. Yang and A. Plaza. Spatial Technology and Social Media in Remote Sensing: A Survey. Proceedings of the IEEE, vol. 105, no. 10, pp. 1855-1864, October, 2017 [IF(2017)=9.107].

M. Chi, A. Plaza, J. A. Benediktsson, Z. Sun, J. Shen and Y. Zhu. Big Data for Remote Sensing: Challenges and Opportunities. Proceedings of the IEEE, vol. 104, no. 11, pp. 2207-2219, November 2016 [IF(2016)=9.237].

C.2. Proyectos más relevantes

Título del proyecto: Hyperspectral Imaging Network (HYPER-I-NET).
Entidad financiadora: Comisión Europea (MRTN-CT-2006-035927)
Entidades participantes: 15 socios de 10 paises Europeos
Financiación concedida: 2.8 Millones de Euros
Duración, desde:2007 hasta: 2011
Número de investigadores participantes: 15

Título del proyecto: High Performance Computing Centre (HOST)
Entidad financiadora: FP7 REGPOT (FP7-REGPOT-CT-2011-284595-HOST)
Entidades participantes: Socios de 5 países europeos
Financiación concedida: 2.2 Millones de Euros
Duración, desde: 2012 hasta: 2014
Número de investigadores participantes: 12

Título del proyecto: Tools for Open Multi-Risk Assessment Using Earth Observation Data (TOLOMEO)
Entidad financiadora: Marie Curie Action for International Research Staff Exchange (PIRSES-GA-2009)
Entidades participantes: Socios de 4 países europeos y 5 países en sudamérica
Financiación concedida: 125.000 Euros
Duración, desde: 2011 hasta: 2014
Número de investigadores participantes: 18

Título del proyecto o contrato: Tools for Mapping Human Exposure to Risky Environmental Conditions by Means of Ground and Earth Observation Data (EOXPOSURE)
Entidad financiadora: Marie Sklodowska-Curie Research and Innovation Staff Exchange (H2020-MSCA-RISE-2016-734541)
Entidades participantes: Socios de 3 países europeos y 2 países en sudamérica
Duración: Desde: 2017 Hasta: 2021 Nº total de meses: 48
Financiación total concedida: 270.000 Euros
Nº de Investigadores participantes: 15

Título del proyecto: Open European Network for High Performance Computing on Complex Environments
Entidad financiadora: European Cooperation in Science and Technology (IC0805)
Entidades participantes: Socios de 17 países europeos
Financiación concedida: 60.000 Euros
Duración, desde: 2009 hasta: 2011
Número de investigadores participantes: 35

Título del proyecto: Desarrollo de técnicas de APRendizaje profundo para la optimización de la Infraestructura de Supercomputación y de Aplicaciones de imagen hiperespectral (APRISA)
Entidad financiadora: Ministerio de Ciencia e Innovación
Referencia del proyecto: PID2019-110315RB-I00
Entidades participantes: Universidad de Extremadura
Duración: Desde: 2020 Hasta: 2022 Nº total de meses: 36
Financiación total concedida: 91.960 Euros
Nº de Investigadores participantes: 8

Título del proyecto: Sistema integral de monitorización multiresolución en agricultura de precisión (SIMMAP): Procesamiento de imágenes (media y baja resolución)
Entidad financiadora: Ministerio de Economía y Competitividad (TIN2015-63646-C5-5-R)
Entidades participantes: Universidad de Extremadura, Universidade A Coruña
Finaciación concedida: 84.700 Euros
Duración, desde: 2016 hasta: 2018
Número de investigadores participantes: 10

Título del proyecto: Calibración de satélites de observación de la Tierra en España (CEOS-SPAIN).
Entidad financiadora: Ministerio de Ciencia e Innovación (AYA2011-29334-C02-02)
Entidades participantes: Universidad de Extremadura, Universidad de Valencia
Financiación concedida: 120.000 Euros
Duración, desde: 2012 hasta: 2014
Número de investigadores participantes: 10

Título del proyecto: Procesamiento eficiente de datos hiperespectrales utilizando arquitecturas de computación paralela.
Entidad financiadora: Ministerio de Ciencia e Innovación (AYA2008-05965-C04-02)
Entidades participantes: Universidad de Extremadura, Universidad de Valencia, Universidad Jaume I de Castellón
Financiación concedida: 98.000 Euros
Duración, desde: 2009 hasta: 2011
Número de investigadores participantes: 10