Part A. PERSONAL INFORMATION

First and Family name	Oscar Plata González		
Social Security, Passport, ID number	42.062.549-B	Age	57
Researcher codes	WoS Researcher ID *(*)*	M-3355-2014	
	SCOPUS Author ID*(*)*		
	Open Researcher and Contributor ID (ORCID) **	0000-0003-2233-0011	

CV date	26/09/2019

(*) At least one of these is mandatory
(**) Mandatory

A.1. Current position

Name of University/Institution	University of Malaga
Department	Computer Architecture
Address and Country	ETSI Informatica, Campus Teatinos, E-29010 Malaga
Phone number	95 213 3318 E-mail oplata@uma.es
Current position	Full Professor From 27/06/2002
Key words	Computer Architecture, High Performance Computing

A.2. Education

PhD	University	Year
Physics	University of Santiago de Compostela, Spain	1989

A.3. JCR articles, h Index, thesis supervised…

6-year research periods: 5 (last one corresponds to 2010-2015)
Thesis supervised (since 2009): 6
JCR articles: 40
Citations: 694
Cites per year (last 5 years): 33
H Index: 15
I10 Index: 22

Part B. CV SUMMARY *(max. 3500 characters, including spaces)*

Oscar Plata has been Full Professor of Computer Architecture and Technology at the University of Malaga since 2002. He received his degree in Physical Sciences from the University of Santiago de Compostela in 1985 and his PhD from the same university in 1989. He has been associate professor at the Universities of La Coruña, Santiago de Compostela and, since 1995, Málaga.

Prof. Plata is Director of the Computer Architecture Department of the University of Malaga since 2013.

For the past 25 years, Prof. Plata has been working on various aspects related to high-performance computing and computer architecture, specially in manual and automatic parallelization techniques for various parallel architectures, both private and shared memory. Lately, his main interest is focused on optimizing the programming of multicore and heterogeneous architectures, as well as the performance and energy efficiency of parallel applications.

As a result of this activity, Prof. Plata is the author of more than 175 scientific publications, has supervised 8 PhD theses and two more in development, and has participated in more than ten National Plan projects, several national and international networks and several European projects. Likewise, he has carried out various activities of technology transfer to the industry. In particular, he has been co-founder of the technology-based company Tedial, S.L.

Prof. Plata has been Associate Editor of IEEE Transactions on Computers from 2015 to 2019, and a member of the Euro-Par Advisory Board.

Prof. Plata has been a reviewer for ANEP since 2003, the Seneca Foundation (Murcia) since 2005, ACSUG (Galicia) since 2012 and ACSUCYL (Castilla y León) since 2011. In addition, he was a member of the Panel of Experts of ANECA from 2008 to 2017 and of Advisory Committee 6.2 of the CNEAI from 2011 to 2013.

Part C. RELEVANT MERITS

C.1. Publications (including books) (JCR journals)

1- R. Quislant, E. Gutierrez, E.L. Zapata and O. Plata, "Improving hardware transactional memory parallelization of computational geometry algorithms using privatizing transactions", **Journal of Parallel and Distributed Computing**, 131, September 2019, pp. 103-119.

2- I. Fernandez, A. Villegas, E. Gutierrez and O. Plata, "Accelerating Time Series Motif Discovery in the Intel Xeon Phi KNL Processor", **Journal of Supercomputing**, June 2019.

3- J.M. Herruzo, S. Gonzalez-Navarro, P. Ibañez, V. Viñals, L. Alastruey and O. Plata, "Accelerating Sequence Alignments Based on FM-Index Using the Intel KNL Processor", **IEEE/ACM Transactions on Computational Biology and Bioinformatics**, December 2018.

4- A. Villegas, R. Asenjo, A. Navarro, O. Plata and D. Kaeli, "Lightweight Hardware Transactional Memory for GPU Scratchpad Memory", **IEEE Transactions on Computers**, 67 (6), June 2018, pp. 816-829.

5- A. Villegas, A. Navarro, R. Asenjo and O. Plata, "Toward a Software Transactional Memory for Heterogeneous CPU-GPU Processors", **Journal of Supercomputing**, April 2018.

6- R. Quislant, E. Gutierrez, E.L. Zapata and O. Plata, "Privatizing Transactions for Lee's Algorithm in Commercial Hardware Transactional Memory", **Journal of Supercomputing**, 74 (4), April 2018, pp. 1676-1694.

7- M. Pedrero, E. Gutierrez, S. Romero and O. Plata, "ReduxSTM: Optimizing STM Designs for Irregular Applications", **Journal of Parallel and Distributed Computing**, 107, September 2017, pp. 114-133.

8- R. Quislant, E. Gutierrez, E.L. Zapata and O. Plata, "Lazy Irrevocability for Best-Effort Transactional Memory Systems", **IEEE Transactions on Parallel and Distributed Systems**, 28 (7), July 2017, pp. 1919-1932.

9- R. Quislant, E. Gutierrez, E.L. Zapata and O. Plata, "Enhancing Scalability in Best-Effort Hardware Transactional Memory", **Journal of Parallel and Distributed Computing**, 104, June 2017, pp. 73-87.

10- R. Quislant, E. Gutierrez, E.L. Zapata and O. Plata, "Leveraging Irrevocability to Deal with Signature Saturation in Hardware Transactional Memory", **Journal of Supercomputing**, 73 (6), June 2017, pp. 2525-2557.

11- M. Pedrero, E. Gutierrez, S. Romero and O. Plata, "A Comparative Analysis of STM Approaches to Reduction Operations in Irregular Applications", **Journal of Computational Science**, 17 (Part 3), November 2016, pp. 630-638.

12- R. Doallo and O. Plata, "Multicore Cache Hierarchies: Design and Programmability Issues (editorial)", **Concurrency and Computation: Practice and Experience**, vol. 26 (6), June 2014, pp. 1326-1327.

13- M.A. Gonzalez-Mesa, E. Gutierrez, E.L. Zapata and O. Plata, "Effective Transactional Memory Execution Management for Improved Concurrency", **ACM Transactions on Architecture and Code Optimization**, 11 (3), October 2014, Art. No. 24.

14- R. Quislant, E. Gutierrez, O. Plata and E.L. Zapata, "Hardware Signature Designs to Deal with Asymmetry in Transactional Data Sets", **IEEE Transactions on Parallel and Distributed Systems**, 24 (3), March 2013, pp. 506-519.

15- R. Quislant, E. Gutierrez, O. Plata and E.L. Zapata, "LS-SIG: Locality-Sensitive Signatures for Transactional Memory", **IEEE Transactions on Computers**, 62 (2), February 2013, pp. 322-335.

16- S. Tabik, F. Romero, P. Mimica, O. Plata and E.L. Zapata, "VLBI-Resolution Radio-Map Algorithms: Performance Analysis of Different Levels of Data-Sharing on Multisocket, Multicore Architectures", **Computer Physics Communications**, 183 (9), September 2012, pp. 1937-1946.

C.2. Research projects and grants

- High Performance Architectures for Data-Intensive Applications
CICYT ref. TIN2016-80920-R, 2017-2019, IPs: Emilio López Zapata y Oscar Plata González
Funding amount: 405,471 euros

- Acceleration of Data-Intesive Applications in Architectures with 3D-stacked Memories
FederJA ref. UMA18-197, 2020-2021, IPs: Oscar Plata González y Emilio López Zapata
Funding amount: 77,608.63 euros

- Technologies for Long-Term Archiving of Digital Information
JA ref. P12 TIC-1470, 2014-2019, IP: Oscar Plata González
Funding amount: 120,394 euros

- Network of Excellence: Supercomputing and eScience (SyeC)
CICYT ref. TIN2014-52608-REDC, 2015-2016, IP: Mateo Valero Cortés (BSC)
Funding amount: 59,000 euros

- Architectures, Compilers and Applications in Multiprocessors
CICYT ref. TIN2013-42253-P, 2014-2016, IPs: Emilio López Zapata y Oscar Plata González
Funding amount: 207,878 euros

- Architectures, Compilers and Applications in Multiprocessors
CICYT ref. TIN2010-16144, 2011-2013. IP: Emilio López Zapata
Funding amount: 610,082 euros

- Optimization of the Transactional Memory Model for Programming Multicore Processors
JA ref. P08 TIC-4341, 2009-2013, IP: Emilio López Zapata
Funding amount: 129,523.60 euros

- Supercomputing and eScience (SyeC)
CONSOLIDER-INGENIO 2010 ref. CSD2007-00050, 2007-2012, IP: Mateo Valero Cortés
Funding amount: 5,000,000 euros

- Architectures, Compilers and Applications in Multiprocessors
CICYT ref. TIN2006-01078 (Consolider), 2007-2011, IP: Emilio López Zapata
Funding amount: 1,028,500 euros

- iVM: Immortal Virtual Machine – Solving the Problem of File Format and Infrastructure Obsolescence
EU Eureka Eurostars E!12494, 2018-2021, IP: Rune Bjerkestrand (Piql)
Funding amount: 2,085,200 euros

- ARCHIVATOR: Archivator Process – The Solution for Long-Term Archiving of Digital Data
EU Eureka Eurostars E!4683, 2009-2012, IP: Rune Bjerkestrand (Cinevation)
Funding amount: 7,500,00 euros

- HiPEAC-5: High Performance and Embedded Architecture and Compilation
EU H2020 ICT-2017-779656, 2017-2020, IP: Koen de Bosschere (Ghent University)
Funding amount: 2,600,000 euros

- HiPEAC-4: High Performance and Embedded Architectures and Compilation
EU H2020 ICT-2015-687698, 2016-2018, IP: Koen de Bosschere (Ghent University)
Funding amount: 3,480,000 euros

- HiPEAC-3: NoE on High Performance and Embedded Architectures and Compilation
EU FP7 ICT-287759, 2012-2016, IP: Koen de Bosschere (Ghent University)
Funding amount: 3,808,245 euros

- HiPEAC-2: NoE on High Performance and Embedded Architectures and Compilation
EU FP7 ICT-217068, 2008-2012, IP: Koen de Bosschere (Ghent University)
Funding amount: 4,800,000 euros

C.3. Contracts

- SPECIFIC COLLABORATION AGREEMENT (TEDIAL): Immortal Virtual Machine – Solutions for Logical Obsolescence in Digital Preservation Systems.
Length: 2,5 years (2018-2021)
Principal investigator: Oscar Plata González
Funding amount: 200,000 euros

- SPECIFIC COLLABORATION AGREEMENT (CINEVATION): Consultancy on Long-Term Digital Archive Systems.
Length: 1 year renewable (2014).
Principal investigator: Oscar Plata González
Funding amount: 10,000 euros

- SPECIFIC COLLABORATION AGREEMENT (TEDIAL): Development and Integration of a Long-Term Digital Archive System.
Length: 3 years (2010-2013).
Principal investigator: Oscar Plata González
Funding amount: 45,000 euros

- SPECIFIC COLLABORATION AGREEMENT (TEDIAL): Automation, Indexing and Video and Audio Archive Systems for Digital Television.
Length: 6 years (2001-2007).
Principal investigator: Oscar Plata González

- SPECIFIC COLLABORATION AGREEMENT (ANDALUCÍA DIGITAL MULTIMEDIA): Multimedia Information Systems Design.
Length: 2 years (2000-2001).
Principal investigator: Nicolás Guil Mata

- COMPANY CREATION: TEDIAL (Inititative NEOTEC, MCYT)
Creación de la empresa de base tecnológica Tecnologías Digitales Audiovisuales (TEDIAL)
Creation year: 2001