

**PERSONAL
INFORMATION**

Name: Toni Cortes
Birth place: Palma de Mallorca, Spain
Status: Associate professor
Affiliation: Departament d'Arquitectura de Computadors
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EDUCATION

1992: Computer Science engineer degree at the Universitat Politècnica de Catalunya
1997: PhD on Computer Science at the Universitat Politècnica de Catalunya

**MANAGEMENT
POSITIONS**

2000-2004: Vice dean for International Affairs at the Barcelona School of Informatics at the Universitat Politècnica de Catalunya
2006-: Coordinator of the SSI area in the IEEE TCSC
2006-: Manager of the storage system research group at the Barcelona Supercomputing Center

R&D PROJECTS

10 national projects and 14 international projects
Most relevant international projects
2001-2004: POP – Performance Portability of OpenMP
2005-2008: Increase the scalability of MPI and UPC
(Cooperation with IBM TWJ research lab)
2006-2010: XtreamOS – Enabling Linux for the Grid
2010-2013: IOLanes – Advancing the scalability and performance of I/O subsystems in multi-core platforms
2011-2015: Severo Ochoa
2015-2018: BigStorage – Storage-based convergence between HPC and Cloud to handle big data
2015-2018: NextGenIO – The next generation I/O for the Exascale

PUBLICATIONS

111 technical papers (27 journal papers and 86 international conferences and workshops), **2 book chapters**, and **1 book** co-edited
Most relevant publications
dataClay: a distributed data store for effective inter-player data sharing, J. Martí, A. Queralt, D. Gasull, A. Barceló, J.J. Costa, and T. Cortes *Journal of Systems and Software*, May 2017
File System Scalability with Highly Decentralized Metadata on Independent Storage Devices P. lensing, T. Cortés, J. Hughes and A. Brinkmann CCGRid 2016, Cartagena, Colombia, May 16-19, 2016
Random Slicing: Efficient and Scalable Data Placement for Large-Scale Storage Systems A. Miranda, S. Effert, Y. Kang, E.L. Miller, I. Popov, A. Brinkmann, T. Friedetzky, T. Cortes *ACM Transactions on Storage* vol 10, num 3, July 2014
CRAID: Online RAID Upgrades using Dynamic Hot Data Reorganization. A. Miranda and T. Cortes. 12 th USENIX Conference on File and Storage Technologies (FAST '14), Santa Clara, CA, February 17-20, 2014
A Study on Data Deduplication in HPC Storage System. D. Meister, J. Kaiser, A. Brinkmann, T. Cortes, M. Kuhn, and J. Kunkel. Supercomputing 2012 (SC12), Salt Lake City, Utah, November 10-16, 2012
The XtreamFS architecture—a case for object-based file systems in Grids F. Hupfeld, T. Cortes, B. Kolbeck, J. Stender, E. Focht, M. Hess, J. Malo, J. Marti, and E. Cesario. *Concurrency and Computation: Practice and experience*, Volume 20, No. 17, pp. 2049-2060, December 2008

COMMUNITY SERVICES	<p>Served in many conference program, organization, and steering committees General chair for Cluster 2006, LaSCo 2008, XtremOS summit 2009, and SNAPI 2010. Program/area chair for CCGrid, Cluster, Euro-Par, HiPC, HPCS, and SC. 2011-2014: Chair of the steering committee for the Cluster conference series</p>
UNDERGRAD TEACHING	<p>1992-: Courses on Operating Systems and Computer Architectures at the Barcelona School of Informatics at the Universitat Politècnica de Catalunya</p>
POSTGRADUATE TEACHING	<p>2000-2006: Regular invited professor at Reading University 2007-2010: Regular invited professor at Universidad de Granada 1997-: 10 PhD theses advised</p>
AWARDS & RECOGNITIONS	<p>2003: IPDPS 2003 best paper award 2005: Distinció Jaume Vives (group award for the definition of the computer science curricula based on the new European Space of Higher Education) 2005: UPC Teaching quality award (group award for the definition of the computer science curricula based on the new European Space of Higher Education) 2006: SPECTS 2006 best paper award 2007: IEEE CS "Certificate of appreciation" 2010: Teaching excellence award (by Universitat Politècnica de Catalunya) 2013: ROME 2013 best paper award</p> <p>4 "Quinquenios docentes" (recognition of teaching merits, in 5-year periods, by the Spanish Ministry of education). Periods 1993-1997, 1998-2002, 2003-2007, and 2008-2012. Furthermore, period 2003-2007 has been awarded for its especial quality (Mérito docente de especial calidad) by the University.</p> <p>3 "Sexenios de investigación" (recognition of research merits, in 6-year periods, by the Spanish Ministry of education). Periods 1994-1999, 2000-2005, 2006-2011</p>