

**PERSONAL  
INFORMATION**

**Name:** Toni Cortes  
**Birth place:** Palma de Mallorca, Spain  
**Status:** Associate professor  
**Affiliation:** Departament d'Arquitectura de Computadors  
Universitat Politècnica de Catalunya  
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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  
**2006-2010: 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*  
**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**  
**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**  
**2017-2019: mF2C – Towards an Open, Secure, Decentralized and Coordinated Fog-to-Cloud Management Ecosystem**

**PUBLICATIONS**

**115 technical papers** (28 journal papers and 87 international conferences and workshops), **3 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

<b>COMMUNITY SERVICES</b>	<p>Served in many conference program, organization, and steering committees  General chair for Cluster 2006, LaSCo 2008, XtreamOS 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>
<b>UNDERGRAD TEACHING</b>	<p><b>1992-:</b> Courses on Operating Systems and Computer Architectures at the <b>Barcelona School of Informatics</b> at the Universitat Politècnica de Catalunya</p>
<b>POSTGRADUATE TEACHING</b>	<p><b>2000-2006:</b> Regular invited professor at <b>Reading University</b>  <b>2007-2010:</b> Regular invited professor at <b>Universidad de Granada</b>  <b>1997-:</b> <b>11 PhD theses advised</b></p>
<b>AWARDS &amp; RECOGNITIONS</b>	<p><b>2003: IPDPS 2003 best paper award</b>  <b>2005: Distinció Jaume Vives</b> (group award for the definition of the computer science curricula based on the new European Space of Higher Education)  <b>2005: UPC Teaching quality award</b> (group award for the definition of the computer science curricula based on the new European Space of Higher Education)  <b>2006: SPECTS 2006 best paper award</b>  <b>2007: IEEE CS "Certificate of appreciation"</b>  <b>2010: Teaching excellence award (by Universitat Politècnica de Catalunya)</b>  <b>2013: ROME 2013 best paper award</b></p> <p><b>4 "Quinquenios docentes"</b> (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><b>3 "Sexenios de investigación"</b> (recognition of research merits, in 6-year periods, by the Spanish Ministry of education). Periods 1994-1999, 2000-2005, 2006-2011</p>