

# Luis Garcés-Erice

# Curriculum Vitae

CONTACT INFORMATION	IBM Research GmbH Säumerstrasse 4 CH-8803 Rüschlikon Switzerland	Tel.: +41 44-724-8763 (office) Tel.: +41 78-628-9321 (mobile) Fax: +41 44-724-8911 E-mail: lga@zurich.ibm.com Web: www.zurich.ibm.com/~lga
NATIONALITY	Spanish	
BIRTH	April the 1 <sup>st</sup> , 1977, Pamplona, Spain	
RESEARCH INTERESTS	Peer-to-peer systems, scalable distributed systems, complex process automation, cloud computing, middleware, computer network protocols, sensor networks, performance evaluation.	
EDUCATION	PhD in Computer Science and Networks, <b>Telecom Paris (ENST)</b> , Paris, France (December 2004) <ul style="list-style-type: none"><li>• Dissertation topic: "<b>Hierarchical P2P Network Design and Applications</b>"</li></ul> MSc Thesis (Internship), <b>Institut Eurecom</b> , Sophia-Antipolis, France (September 2000-April 2001) <ul style="list-style-type: none"><li>• Thesis title: "<b>Firewall Verification of Application-Level Authorizations</b>"</li></ul> MSc Telecommunication Engineering, <b>Public University of Navarra</b> , Pamplona, Spain (July 2001)	
ACADEMIC AND RESEARCH EXPERIENCE	<b>IBM Research</b> , Zürich, Switzerland <i>Research Staff Member</i> Research conducted on image deployment and management for Cloud, Real-time middleware. <b>May 2008 - present day</b>	
	<b>IBM Research</b> , Zürich, Switzerland <i>Post-Doc</i> Research conducted on sensor networks, distributed systems and publish/subscribe mechanisms. <b>February 2005 - April 2008</b>	
	<b>Institut Eurecom</b> , Sophia Antipolis, France <i>Teaching and Research Assistant</i> Work includes PhD research work, contributing to France Telecom's project <b>VTHD++</b> on high performance networking, supervising internship students, teaching a course on P2P systems. <b>January 2002 - January 2005</b>	
	<b>Institut Eurecom</b> , Sophia Antipolis, France <i>Research Engineer</i> Design and implementation of a P2P storage system prototype in Java. <b>January 2002 - December 2003</b>	
	<b>Institut Eurecom</b> , Sophia Antipolis, France <i>Research Engineer</i> Implementation, deployment and performance testing of a transparent web caching infrastructure. <b>May 2001 - December 2001</b>	
SELECTED PUBLICATIONS	For a full list of all my publications please refer to the web site above. Recent selected publications: <ul style="list-style-type: none"><li>❑ <i>Guaranteeing Consistency between Large Replicated Writable Disk Images</i> Sean Rooney and Luis Garcés-Erice In Proceedings of the 9<sup>th</sup> International Conference on Network and Service Management, 2013.</li><li>❑ <i>Secure Lazy Provisioning of Virtual Desktops to a Portable Storage Device</i> Luis Garcés-Erice and Sean Rooney In the 21<sup>st</sup> International Symposium on High Performance Distributed Computing, 2012.</li><li>❑ <i>Admission Ctrl. for Responsive Distributed Middleware using Decision Trees to Model RunTime Params.</i>, Luis Garcés-Erice Parallel Computing, Volume 37, Issue 8, August 2011, Pages 379-391.</li><li>❑ <i>Scaling OS Streaming through Minimizing Cache Redundancy</i>, Luis Garcés-Erice and Sean Rooney In the IEEE 31<sup>st</sup> International Conference on Distributed Computing Systems, 2011.</li><li>❑ <i>OS Streaming Deployment</i>, David Clerc, Luis Garcés-Erice and Sean Rooney In the IEEE 29th International Performance Computing and Communications Conference, 2010.</li></ul>	

Other selected publications:

- Weighted Fair Share Scheduling for Loosely Controlled Concurrent Event Systems*, Sean Rooney, Luis Garcés-Erice, Kristijan Dragicevic and Daniel Bauer  
Service Oriented Computing and Applications, Vol. 4, No. 1, 2010.
- A Flexible and Scalable Message Broker for Sensor Network Integration*, Luis Garcés-Erice, Daniel Bauer and Paolo Scotton  
In 4<sup>th</sup> International Conference on COMmunication System softWARe and middlewaRE, 2009.
- Robust and Topology-Aware Peer-to-peer Multicast Service*  
Luis Garcés-Erice and Ernst Biersack  
In *Computer Communications*, April 2006 (Vol. 29, Issue 7)
- Data Indexing in Peer-to-Peer DHT Networks*  
Luis Garcés-Erice, P. A. Felber, E. W. Biersack, G. Urvoy-Keller and K. W. Ross  
In the IEEE 24<sup>th</sup> International Conference on Distributed Computing Systems (ICDCS), 2004.
- Dissecting BitTorrent: Five Months in a Torrent's Lifetime*  
M. Izal, G. Urvoy-Keller, E. W. Biersack, P. A. Felber, A. Al Hamra and Luis Garcés-Erice  
In *Passive and Active Measurements (PAM)*, 2004.
- Hierarchical Peer-to-Peer Systems*  
Luis Garcés-Erice, E. W. Biersack, K. W. Ross, P. A. Felber and G. Urvoy-Keller  
In the Special issue of the *Parallel Processing Letters (PPL)*, December 2003 (Vol.13, No 4).
- Topology-Centric Look-Up Service*, ©Springer-Verlag, LNCS  
Luis Garcés-Erice, K. W. Ross, E. W. Biersack, P. A. Felber and G. Urvoy-Keller  
In the ACM Fifth International Workshop on Networked Group Communications (NGC), 2003.

SELECTED  
PATENTS

For a full list of all my patents please refer to the web site above.

- Transmitting Data including pieces of Data, US Patent 20,130,060,882 (2013)
- Declarative Service Domain Federation, US Patent 20,120,233,295 (2012)
- Provisioning of operating systems to user terminals, WO Pat. App. PCT/IB2012/053,394 (2011)
- Data Processing System, method for processing data and computer program product, US Patent App. 13/015,718 (2011)
- File System support for inert files, US Patent App. 13/249,276 (2011)
- Deploying an operating system, US Patent App. 13/083,217 (2011)
- Efficient maintenance of a distributed system membership view, US Pat. App. 12/372,062 (2009)
- Communication device, US Patent App. 12/624,456 (2009)

AWARDS AND  
SCHOLARSHIPS

- IBM *Acomplishment* for contributions to messaging middleware.
- Best Paper Award** in the ACM 5<sup>th</sup> International Workshop on Networked Group Communications, 2003.
- EGIDE (France) Foreign Student scholarship for PhD Studies, 2002-2003

PROFESSIONAL  
ORGANIZATIONS

- IEEE member (Communications society and Computer society)
- ACM member (SIGOPS and SIGAPP)

COMPUTING  
SKILLS

- Programming Languages: C, Perl, Java, Python, Shell. Rudiments of Erlang, PHP.
- Operating Systems: Linux, Unix (Solaris, AIX, FreeBSD), Windows, TinyOS.

LANGUAGES

- Spanish: Mother tongue.
- English: Proficient. Cambridge University *Advanced* grade obtained in 1995.
- French: Proficient.
- German: Zertifikat Deutsch from Goethe Insitut obtained in 2006.

OTHER  
EXPERIENCES

- May 2007*: Attending one-week MBA at IBM.
- 2003-2004*: Organizer of a *Journal Club* for PhD students to discuss current research topics.
- 1997-2000*: Active member of students association *Grupo Universitario* (Group for University); elected student's speaker for Academic council. Organizer of seminars for students.

REFEREES

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