

Alexandre di Costanzo

Software Engineer/Tech Lead

✉ Valbonne, France

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34 years old

Tech Lead & Software Architect for Cloud Solutions

Profile

Strong technical background in distributed computer systems and object oriented programming languages. Confirmed experiences in grid, cloud systems, concurrent and parallel programming. Experiences in software conception and development.

Situation

Since December 2011 **Tech Leader and Architect at Docapost BPO, France**

Tech Leader of Contralia, a SaaS solution for legal digital signature.

- Team Leader of the dematerialization processes and digital legal signatures team (up to ten peoples)
- Design and development of the core and generic software components (workflow engine, security, monitoring, *etc.*)
- Contribute to the physical infrastructure architecture for applications with a 99.9 SLA
- Manage customers relations during developments phases (banks, insurance companies, national institutions)

Skills

Languages: Java (+ 9y), Groovy (+ 4y), Python, C/C++, UNIX shells, XML, SQL, LaTeX, JSON, Markdown

Web Framework: Spring Grails (+ 4y), Spring Source

Web Services: SOAP & REST (architecting/implementing)

Development Tools (+ 9y): Eclipse, NetBeans, IDEA, CVS, Subversion, Git, Redmine, Trac, GForge, Jenkins/Hudson, Sonar, Wiki

Distributed and Grid Technologies: J2EE, RPC/RMI, Apache Hadoop (Map Reduce), Reservation and submission tools (OAR, PBS, LSF, Sun Grid Engine)

Virtualization and Cloud (+5y): Xen, KVM, Amazon AWS (EC2/S3/CloudFront), Open Nebula

Server Technologies: Apache Tomcat, Apache HTTPD, Postgresql, MySQL, Linux and scripting

Operating Systems: Advanced user of UNIX & Linux, Windows

Information dissemination: Redaction (and peer-reviewing) of scientific papers for international journals, conferences, and books; tutorials for ProActive Parallel Suite

- 2009-10 **Owner and Founder of Casual Syndicate K. K., Japan**
- Casual Gaming Digital Download Distribution
 - Architect & Developer of a SaaS platform for managing & distributing digital contents (such as games), built on top of cloud providers (Amazon AWS)
- 2008-09
18 months **Research Fellow at the University of Melbourne, Australia**
- Conception, development, and evaluation of the InterGrid middleware to interconnect computing infrastructures (clusters, grids, and clouds)
 - Amazon Web Services Research Grant of US\$ 5,000 awarded, June 2009
- 2007
2 months **Software Engineer at National Institute of Computer Science (INRIA), France**
- Developer of a Java middleware: ProActive Parallel Suite
- 2004 - 07
3 years **PhD in Computer Science:**
 “Branch-and-Bound with P2P on Large-Scale Grids”
University of Nice Sophia-Antipolis / INRIA, France
- Built a computing infrastructure using clusters and desktop machines
 - Development of a framework to solve optimization problems
 - Developer of ProActive, user support, maintenance, demonstrations and presentations in international events
 - International projects: CoreGrid, Grid'5000, Data Grid eXplorer, GridComp
 - Dissemination of this thesis: Grant of 1M€ / 4 years to professionalize the computing infrastructure
- 2004
3 months **Visiting Researcher at Indiana University, Bloomington, USA**
- Extreme Computing group: “Asynchronous Peer-to-Peer Web Services and Firewalls”

Education

2004 – 07 Ph.D. in Computer Science:

“Branch-and-Bound with P2P on Large-Scale Grids”

University of Nice Sophia-Antipolis / National Institute of Computer Science (INRIA)

2003 – 04 Master in Computer Science: Networks and Distributed Systems

University of Nice Sophia-Antipolis, passed with honors, ranked 1st

Internships

- 2004
4 months **INRIA, in Sophia-Antipolis, France**
- Master research internship in OASIS research group: “P2P Model and Infrastructure for Communicating Applications”
- 2003
4 months **INRIA, in Sophia Antipolis, France**
- Development of a generic test and benchmark API for ObjectWeb ProActive

2002 4 month	Quadrino, in La Gaude, France Created a cooperative application to manage real estates: buildings and apartments reservations
1999 4 months	European Telecommunications Standards Institute (ETSI), in Sophia Antipolis IT maintenance and preparation to the 2000 year bug
1998 4 months	ETSI, in Sophia Antipolis, France Developed an intranet site for the IT department

Relevant Publications

Evaluating the Cost-Benefit of Using Cloud Computing to Extend the Capacity of Clusters, Marcos Dias de Assunção, Alexandre di Costanzo, Rajkumar Buyya, *IEEE International Symposium on High Performance Distributed Computing*, 2009

Peer-to-Peer for Computational Grids: Mixing Clusters and Desktop Machines, Denis Caromel, Alexandre di Costanzo, Clément Mathieu. *Parallel Computing Journal on Large Scale Grid*, 2007

Grid'BnB: A Parallel Branch & Bound Framework for Grids, Denis Caromel, Alexandre di Costanzo, Laurent Baudel, Satoshi Matsuoka, *International Conference on high Performance Computing*, 2007

Branch-and-Bound with Peer-to-Peer for Large-Scale Grids, Alexandre di Costanzo, Ph.D. thesis, University of Nice Sophia Antipolis, 2007

Spoken Languages

<i>French</i>	Mother tongue
<i>English</i>	Fluent

Personal Project

The Pieuvre <http://www.thepieuvre.com> News Reader (RSS reader) based on natural language processing for extracting keywords and grouping articles by similarities.
Technologies: Python NLTK, Redis, Grails/Groovy