

# Alexandre di Costanzo

Technical Director & Product Manager

## Expert in Software Development for Insurers & Strong Background in Large Distributed System

### Profile

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Confirmed experiences in team leading & technical management of SaaS business product.

Strong technical background in distributed computer systems and programming languages.

Experiences in software conception and development: grid, cloud systems, concurrent and parallel programming.

### Situation at Docaposte, France

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Since 2014

#### Technical Director & Product Manager - Insurance BU

Previously known as Proveance (Docaposte's spinoff, now reincorporated) the Insurance Business Unit develop and run a global outsourced solution for life/health insurance management: fully SaaS. The solution covers most of the needs of insurances business (sale, accounts, billing, claim, refund, *etc.*) in a bounded medical confidentiality environment.

Main Roles:

- Management & Animation of the software engineering team: 10 peoples onsite and 5 near-shore (Morocco)
- Relation with the Docapost CIO for platform hosting (Docapost runs two Datacenter)
- Determine how the technology is used for implementing business solutions/strategies
- Technical operation manager
- Part of the market research
- In charge of the technology and architecture
- In charge of development and software integration
- In charge of the software quality

Major Accomplishments:

- Setup of the onsite team
- Setup of the near-shore site
- Services oriented architecture based on a designed for failures approach and micro-services
- Platform ready, on schedule, after nine months of developments/setups for the first clients and the accounts managers

2011 - 2013

#### Tech Leader and Architect - Contralia Solution

Tech Leader of Contralia, a SaaS solution for legal digital signature and online subscription (bank account opening, loan finalisation, *etc.*)

- Team Leader of the dematerialisation 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 client relations during developments phases (banks, insurance companies, national institutions)

## Skills

**Languages:** Java, Groovy, Python, C/C++, UNIX shells, XML, SQL, LaTeX, JSON, Markdown, AsciiDoctor

**Web Framework:** Spring Grails, Spring Source, Django

**Web Services:** SOAP & REST (architecting/implementing)

**Development Tools:** Eclipse, NetBeans, IDEA, CVS, Subversion, Git, Redmine, Trac, GForge, Jenkins/Hudson, Sonar, Wiki, GitLab, Emacs

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

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

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

**Operating Systems:** Advanced user of UNIX & Linux, macOS

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

## Experiences

2009-11 24 months	<p><b>Senior Software Engineer at Avisto Telecom, France</b></p> <p>Contractor at Docaposte, <b>Tech Leader and Architect</b> for the Dematerialization and Data Flow department. Two significant projects:</p> <ul style="list-style-type: none"> <li>• Contralia: a SaaS solution for Digital Signature</li> <li>• LRTE (Le Recommandé Tout Electronique): electronic registered mail system for the French national post (La Poste)</li> </ul>
2009-10 18 months	<p><b>Owner and Founder of Casual Syndicate K. K., Japan</b></p> <ul style="list-style-type: none"> <li>• Casual Gaming Digital Download Distribution</li> <li>• Architect &amp; Developer of a SaaS platform for managing &amp; distributing digital contents (such as games), built on top of cloud providers (Amazon AWS)</li> </ul>
2008-09 18 months	<p><b>Research Fellow at the University of Melbourne, Australia</b></p> <ul style="list-style-type: none"> <li>• Conception, development, and evaluation of the InterGrid middleware to interconnect computing infrastructures (clusters, grids, and clouds)</li> <li>• Amazon Web Services Research Grant of US\$ 5,000 awarded, June 2009</li> </ul>
2007 2 months	<p><b>Software Engineer at National Institute of Computer Science (INRIA), France</b></p> <ul style="list-style-type: none"> <li>• Developer of a Java middleware: ProActive Parallel Suite</li> </ul>

- 2004 - 07    **PhD in Computer Science:**  
3 years                    **“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                    **Visiting Researcher at Indiana University, Bloomington, USA**  
3 months                    • Extreme Computing group: “Asynchronous Peer-to-Peer Web Services and Firewalls”

## Education

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- 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 1<sup>st</sup>*

## Relevant Publications

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- 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

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