

# Nuno Valente

## Personal Data

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## Summary

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I am a Software Engineer and am always interested in the success of every project that I am involved with. Educated in the midst of the Java ecosystem while in college and I've gained considerable commercial experience using it daily, but I've also fell in love with the (J)Ruby world while doing my internship. Studying at Universidade Nova has taught me proficiency in assimilating new languages, paradigms, and styles, and I am confident in using them to solve specific problems and build complex systems. Being a Blue Ocean enthusiast I want to be a part of awesome ideas that can cast a brand new look over the existing markets. My expectations are to find a company motivated with breaking away from the status quo, where I can make a difference on their growth and where my ideas can be put into action. Right now, my main focus lies in software stack's that encompass (C)ESP (Complex Event Stream Processing) and BigData technologies, but I'm always eager to learn, create and excel in any field. I'm particularly interested in Machine Learning, Financial Markets, Biotech, IoT, but I'm happy with any domain that sparks my inspiration.

## Work Experience

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2008 - present    **Software and CEP Engineer at Portugal Telecom, Lisbon**

- As a member of a R&D team, I am responsible for maintaining a proactive search of open source technologies that the company could benefit from. It was expected the development of PoC projects that could evaluate the effectiveness of one or more technologies while making use of real company data.
- Undertook the Scrum Master position while working on an in-house monitoring solution.
- Architected and developed several components for the forth and fifth generation of a monitoring platform for IT infrastructures and Business Processes. The major components where I was involved where: a DSL Parser to describe the most common company IT Infrastructures; a service to run a well know CEP engine and to process incoming monitoring events; the middleware to support message flow between the front-end API services and all the monitoring platform components; several sets of rules and heuristics for the CEP engine and some integration components such as ETL processes and message queue integration processes.
- Implemented several monitoring projects for company critical business activities, applications and systems. Those projects required investigative work with the application development teams and owners, proactive search for useful information in the company systems and applications, make and put into action a monitoring plan that included a useful set of metrics, KPI and alarms. These projects were materialized making use of the in-house developed monitoring platform, and I extended it if needed.
- Architected and developed several monitoring agents for Windows based systems. Those agents were installed in the servers that supported the most critical business applications of the company. They had the capability of extracting virtually any measurement from the system. They were also capable of monitoring and extracting log files or Event Log entries in real time.
- Planned and executed load and stress tests on critical product public websites.

2007 - 2008    **Software Engineer Intern at Portugal Telecom, Lisbon**

- Architected and developed core components and monitoring agents for the fourth generation of an in-house monitoring solution, using the acquired knowledge gained while working on my final project at college.
- Finished my final college project entitled "Middleware Security, Performance Monitoring and Analysis" with final grade of 18 on a scale between 10 and 20

## Known and used technologies

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Programming Languages	<p><b>Java</b> - Making use of the common Java ecosystem development tools and frameworks such as JUnit, Spring and Maven2, I've written several components, from monitoring agents integrated with TIBCO Hawk to Esper engine loaders.</p> <p><b>JRuby\Ruby</b> - Wrote ETLs, private gems with API's for internal company services, DSLs, Esper engine loaders, I/O adapters, etc.</p> <p><b>C#</b> - Architected and Developed a Windows service responsible for loading micro-agents that extract system measurements from the PT Portugal Server and Desktop park, ad-hoc logs and Eventlog samples. Also made an API available to third parties to develop their own micro-agents.</p> <p><b>Objective C</b> - Used it while developing in iOS</p>
Complex Event and Stream Processing Engines	<p><b>Esper</b> - Implemented several rule sets to correlate events from mission-critical business processes that require near real time attention such as sales, home equipment malfunction report incidents, IVR calls, etc.</p> <p><b>SEC</b> - Used as an event correlation engine for minor projects.</p> <p><b>Drools</b> - Evaluated comparing with Esper as the go to CESP engine for my team projects.</p>
Databases	<p><b>Neo4J</b> - Architected and developed various PoCs to trace business events and identify system or process bottlenecks while delivering useful metrics and some system communication insights.</p> <p><b>MySQL</b> - Used on most projects that I took part of.</p> <p><b>MongoDB</b> - Evaluated and developed a PoC to replace MySQL on some projects.</p> <p><b>Oracle</b> - Used in a couple of projects in college.</p>
Web Frameworks	<p><b>Ruby on Rails</b> - Used for prototyping some management and metric dashboard web interfaces.</p> <p><b>Sinatra and Node.js</b> - Implemented REST API development.</p>
Middleware\MQ	<p><b>ActiveMQ and Camel</b> - Used as the main message queuing system with Camel routes, processors, etc.</p> <p><b>RabbitMQ</b> - Evaluating as a replacement for ActiveMQ.</p> <p><b>Tibco Rendezvous and EMS</b> - Used to listen event sources for (C)ESP rule sets and to integrate with TIBCO Hawk.</p>
Mobile Framework	<p><b>iOS 4</b> - Developed an unreleased App for a Portuguese startup that operated in the discount card business called XPTO Card.</p>
SCM\Project Management	<p><b>Git</b> - Used for all projects in tandem with Gitorious and Redmine.</p> <p><b>Maven2</b> - Used for all Java projects.</p>
Load Testing	<p><b>QTest</b> - Because OpenSTA didn't had any maintainers the company preferred QTest since it had support from Quotium.</p> <p><b>OpenSTA</b> - Used for limited load tests.</p>
OS's	<p>Daily use of Linux and OSX for both personal and enterprise use (distributions: Red Hat, Debian).</p> <p>Used Windows in a daily basis while developing with .Net C#</p>

## Education

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2001 - 2007    **Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa**  
Major of Science (5 year major pré-Bolonha) in Software Engineering. GPA of 15  
on a scale between 10 and 20.

## Training

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2011    *Scrum Alliance* - Certificate Scrum Master  
2008    *Quotium Technologies* - QTest

## Interests and Activities

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Physical exercise is one of my favorite hobbies and I always try to save some time in my day to do some running, weighting lifting, indoor fitness classes, martial arts or playing football. Besides my main interests in ESP, CEP, Machine Learning, BigData, etc., I also try to keep up with the current hot topics such as Social Web, Online piracy legislation, patent wars and so many more. In my free time I love to read or listen to audiobooks and my tastes tend to fall on the Science Fiction or Technology/Engineering domains. While working at PT Portugal I was also actively involved in two startups - one in the discount card business and one in the spirits business.