Luis Santos

I'm a passionate software engineer focused on building great solutions based on industry best practices. I've architected and built horizontally scalable solutions and implemented message queue and REST architecture patterns using Java and Linux as the main stack.

Experience

July 2017-Now

Iot Lead Developer

Smartfrog

- Promoting development best practices
- Implementing java services using Hibernate, SpringBoot and Java8 on AWS.
- Helping design and implement high available microservices.
- Spliting a monolith app into microservices using an event-driven aproach.
- Leading the development of a next generation device management platform.

Feb 2016-March 2017

Software Architect

SolarWinds MSP (previously logicnow)

- Promoting awareness of development best practices across the company
  - CI/CD , TDD
  - Code review
  - Development patterns, Integration Patterns
  - Security best practices
- Helping teams design and implement high available distributed solutions using industry patterns such as micro-services, message queues, REST architectures and stream processing.
- Help teams choose from the wide range of AWS technologies available.
- Improving the existing data platform by:
  - Designing a new ingestion pipeline based on **gRPC** and **AWS Kinesis**
  - Introducing the **Lambda Architecture** as a way to decouple the components and enable real time use cases
  - Suggesting the **ORC** file format as a replacement for the legacy gzip files. Up to 10x performance improvement and 50% saving on storage requirements.
  - Suggesting SparkSQL as a standard way to get the data accessible to internal users

Sep 2014-Feb 2016　　　　　**Senior Software Developer**

SolarWinds MSP (previously logicnow)

As part of a small team I was responsible for the design and implementation of the next generation of infrastructure capable of taking millions of devices under management.

This new infrastructure, based on an **Event-Driven Architecture**, is composed of several highly decoupled micro-services and uses a Message Queue (**RabbitMQ**) as a way to communicate between components.

As part of this team I shared the responsibility of:

- Introducing companywide code reviews using **Phabricator**
- Introducing the **Onion Architecture**
- Introducing the **Repository pattern** as replacement for Active Record
- Introducing a **DI container**
- Promoting the use of Docker and **IAC**
- Introducing a message queue a way to decople and scale components

Key Skills:

- JAVA, JAX-RS, Guice, Guava, maven, Junit, Mockito
- AWS, Docker, DynamoDB, Elastic beanstalk
- Ansible, Linux
- PHP, PHPunit, composer, SF2

Apr 2014-Aug 2014　　　　　**Java Developer**

Portugal Telecom, **Caixa Magica Software**

As part of this project I was responsible for maintaining a **message queue** solution.

The main goals were:

- Upgrade from Netty 3 to Netty 4
- Rewrite the java client using Netty 4 and NIO
- Maintain the existing clients written in PHP, C, Perl and Python

Key Skills:

- Netty, NIO, IP, TCP, Wireshark
- Java, multithreading programming, Maven, Junit
- JSON, XML, Protobuf, Thrift
- Linux, Android

Oct 2011-Apr 2014　　　　　**PHP Developer**

Portugal Telecom, **Caixa Magica Software**

Frontend and API developer at **wallet.pt**, a mobile, tv and web payment solution.

key Skills:

- PHP, JS, HTML
- SOA, REST
- OWASP TOP 10, PCI-DSS, Cryptography, SSL
- Unit Testing, Continuous Integration
- MySQL, Memcache, Message Queue

May 2008-Oct 2011	**Software Developer**

Paul Stricker SA

Software developer and sysadmin.

key Skills:

- PHP, JS, HTML, Java, JAX-WS, JAX-RS, Hibernate
- Windows Server, Cisco network appliances, SIP
- C#, .NET, Microsoft Fox Pro, ETL

Jul 2013-Dec 2013	**Community enabler**

PHPLX

Responsible for organizing a monthly event.

Education

2005–2011	**BSc, Computer Science Engineering**

Instituto Superior de Engenharia de Coimbra, Portugal

- SQL Databases (Oracle, SQLserver)
- Software engineering, Software patterns and algorithms
- Software Development Java, EJB, C/C++ , C#.NET , ASP.NET
- Networks and protocols, TCP/IP, OSPF, RIP, CCNA

Interests

The Open Source Initiative (OSI) - Individual Member

Open Source software is a fundamental part of our society and i felt that after using open source software for more than 10 years, supporting the OSI was the right thing to do.

Other interests

Java: The java ecosystem is a huge and vibrant ecosystem and takes a life time to master. Some of many the subjects I've been studying:

- Garbage collector and memory management
- Class loader and byte code manipulation
- Java agent - How to debug and profile production code

RabbitMQ: Message Queues are a key piece of any distributed system. I do a lot of research about MQ patterns and how to solve some common problems. I also contribute to RabbitMQ mailing list every time i have an opportunity.

Kotlin and other functional languages: Expressive code is a great way to reduce the number of bugs and increase productivity. I've been looking at other languages and tools to increase productivity on the JVM platform.

Other

- Languages:
  - Portuguese (Native speaker)
  - English (Professional Speaker)
  - Spanish (Basic understanding)

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