

PAULO ALEXANDRE CANILHO

MSc in Software Engineering student

Software Engineer passionate about the upcoming cloud web services and high performance applications.

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EDUCATION

MSc in Software Engineering:

Heriot-Watt University (2016 – 2017)

BSc in Telecommunications and Computer Engineering :

ISCTE-IUL – University of Lisbon

EXPERIENCE

Software Engineer : Clear Returns Ltd. (Apr 2016 – Nov 2016)

- JAVA REST services design, implementation and deployment using ODATA metadata format for e-commerce ease of system of integration;
- Responsible for the creation of the ongoing data processing systematic method for handling big-data ingestion and processing with a high requisite variety in Redshift SQL dialect;
- AWS web services integration, main responsible for the DevOps and AWS JAVA SDK usage for internal process automation from S3, RDS and Redshift with various external services such as: SendGrid and Databricks for machine learning models;
- Security measures implementation at all stages of the development life-cycle;

Computer Engineer : CERN (Jan 2015 – Jan 2016)

- Responsible for the system integration of a mobile monitoring solution with CERN's new provider network, including SNMP alarms setup, OpenStack VM server solution and creation of device data management queries using MSSQL;
- Creation of a near to real-time cybernetical approach to a dashboard system where a user could control and verify the latest status of mobile remote units via a dynamic, user friendly and easy-to-use dashboarding system in HTML/JavaScript/CSS, D3.JS and PHP;
- Work with strong prevention techniques against SQL Injection and session stealing in constantly "under attack" environment;

Android Developer: CERN (Jun 2014 – Sep 2014)

- Creation of two mobile applications for the Android 2.1 system and above with the aim of real-time monitoring of hardware components such as the linear accelerator detectors;
- Server-side implementation based in UNIX with SELinux constraints using JAVA APIs for data management and network capabilities handling.

Research Grant: Microsoft PT – Adetti IUL (Jun 2013 – Jan 2015)

- Common LISP interpretation engine integration with JAVA's Swing libraries for the construction of a LISP graphical interface and ultimately an IDE;
- Shape-grammars algorithms implementation in both common LISP and JAVA for artificial-intelligence and machine learning data processing.

SKILLS

- JAVA8, Java restful web services, Hibernate 3.0, Spring framework;
- Python and Django RESTful web services;
- RDBMS: Sybase, MySQL, PostgreSQL, MSSQL;
- NoSQL: MongoDB, Redis and others;
- Android, Common LISP, ADA Spark 2012+;
- HTML/CSS/JavaScript, D3.JS, PHP, Serial Communication;
- Amazon web services, Tomcat, Jenkins, Redshift, DevOps, Databricks management API, SendGrid automation, CloudWatch monitoring, AWS JAVA8 SDK for S3, SES and SNS, UNIX and MS Server 2008+;
- Agile, classical methodologies and process improvements models: SCRUM, SSADM, XP, CMM, SPICE, Kanban.

PROJECTS

- **Monitoring Dashboard** for near real-time mobile networks 2G, 3G and 4G SNMP alarm system collaboration with CERN IT-CS-TR for ongoing analysis and design;
- **SDR TETRA (400MHz)** Research-driven application development using JAVA APIs for signal processing and GUI.

LANGUAGES

- Bilingual Portuguese/English;
- Fluent reading and experienced writing French.