ANTÓNIO ALEGRIA

PERSONAL DATA

Born in Lisbon, Portugal, February 6, 1985

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PROFILE

Software Engineer who likes to be at the intersection of business and technology. Passionate and experienced in designing and implementing "right-time" Business Activity Monitoring applications using Complex Event Processing. Thrilled to learn, improve the status-quo and solve challenging problems using state-of-the-art tools. Skilled in Java but loves leveraging (J)Ruby's expressiveness to quickly build robust, maintainable and elegant systems.

WORK EXPERIENCE

Fev 2012 – Current FeedZai, Lisbon

Senior Software Engineer Currently in the Research and Future Product Development team.

Software Engineer $Jul\ 2010-Fev\ 2012$ Portugal Telecom (PT) – SAPO.pt, Lisbon

Worked in the Big Data team developing event processing systems and in the Mobile Apps team as an Android developer.

Highlights (Big Data):

- Designing and developing an Esper-based automatic metric aggregator for an in-house KPI management system.
- Developing SAPO Alerts a domain-independent real-time event subscription and filtering platform used by PT and 3rd parties (Java, XML, PostgreSQL, Netty, SOAP).

Highlights (Mobile):

- Implemented and shipped over 5 Android Apps including SAPO News SAPO's flagship App with over 70,000 users.
- Spearheaded Scrum implementation.
- Proactively managed and coordinated a large part of the SAPO News mobile Apps project.

Sep 2008 – Jul 2010 Portugal Telecom (PT), Lisbon

 $Software \\ Engineer$

Core developer of realtime Business Activity Monitoring system - Pulso - using Complex Event Processing (CEP).

Highlights:

- Designed and implemented core CEP system in Pulso (Esper, JRuby, ActiveMQ, Starling, MySQL).
- Designed and implemented domain-independent BAM patterns and rules for business process and application monitoring solutions (Esper).
- Implemented tens of real monitoring scenarios for several mission-critical business processes and applications in PT (Esper, Ruby).

Sep 2008 – Jul 2010 Portugal Telecom (PT), Lisbon

Software Engineer Intern

Developed and applied MSc research in PT. Results were tested in three real-word Information Systems Architectures. Helped development of in-house network application and infrastructure discovery and management system.

Highlights:

- Designed, implemented and applied an automatic IT architecture verification and discovery system that uses deep passive traffic analysis and rule-based logic inference to run a "fact-check" on a proposed IT architecture model (Logtalk/Prolog, Ruby, C and an assortment of network traffic analysis tools).
- Designed and implemented a wide range of deep packet analysis agents for enterprise application identification and error detection (C, Ruby, PADS).

Sep 2008 – Jul 2010 INESC-ID - Distributed Systems Group, Lisbon

Intern Researched and implemented ad-hoc (mesh) network applications for mobile devices

using Bluetooth, RF-ID and Microsoft .Net Compact Framework.

HIGHER EDUCATION

November 2009 Instituto Superior Técnico, Lisbon

MSc in Computer Engineering Major: Software Engineering · Minor: Distributed Systems

Thesis: "Automatic Verification of IT Architecture Models for Networked

Information Systems"

Thesis Grade: $19/20 \cdot \text{GPA}$: 16/20

July 2007 Instituto Superior Técnico, Lisbon

BSc in Computer Engineering Major: Software Engineering $\,\cdot\,$ Minor: Distributed Systems $\,\cdot\,$ GPA: 16/20

TRAINING AND CERTIFICATION

July 2011 Lisbon Machine Learning School

Google-sponsored international summer school.

January 2011 Scrum Alliance – Certificate Scrum Master

Institution: VANTAGEM+

October 2009 Initial Pedagogical Training for Trainers

Institution: PORTUGAL TELECOM INOVAÇÃO, SA

June 2002 Certificate of Proficiency in English

Institution: UNIVERSITY OF CAMBDRIGE, LOCAL EXAMINATIONS SYNDICATE

PUBLICATIONS

ALEGRIA, A., AND VASCONCELOS, A. 2010. IT Architecture Automatic Verification: A Network Evidence-based Approach. In *Proceedings of the Fourth IEEE International Conference on Research Challenges in Information Science*, RCIS 2010, Nice, France, May 2010, LOUCOPOULOS, P. AND CAVARERO, J.L., Eds. 1-12

CONFERENCES & EVENTS

November 2011 Codebits V, Lisbon

Speaker Presented talk Complex Event Processing with Esper.

Video: http://j.mp/cepvideo2011 · Slides: http://j.mp/cepslides2011

May 2011 Startup Weekend, Coimbra

May 2010 RCIS 2010, Nice, France

Speaker Presented paper IT Architecture Automatic Verification: A Network Evidence-based

Approach.

Slides: http://j.mp/rcis2010slides

MAIN SKILLS & INTERESTS

 $Programming \qquad \qquad \text{Ruby and JRuby (including Java integration)} \; \cdot \; \text{Java} \; \cdot \; \text{C} \; \cdot \; \text{Prolog/Logtalk} \; \cdot \;$

Languages Scale

 $\textit{Platforms } \mathscr{C} \qquad \qquad \text{Esper} \; \cdot \; \text{Sinatra} \; \cdot \; \text{Android} \; \cdot \; \text{ActiveMQ, Starling/Kestrel, SAPO Broker}$

 $\dot{L}ibraries$

Databases MongoDB · MySQL · PostgreSQL

English · Fluent (Certificate of Proficiency in English)

 $Spanish \qquad \cdot \quad Competent$

 $Languages \qquad \qquad \text{French} \qquad \cdot \quad \text{Average}$

Japanese · Basic

 ${\tt PORTUGUESE} \ \cdot \ \ Mother \ Tongue$

 $\begin{tabular}{ll} \it Interests & \it CEP \cdot BAM \cdot Ruby \cdot Scrum \cdot Product Design \cdot Startups \end{tabular}$

May 8, 2012