

# ANTÓNIO ALEGRIA

*Born in Lisbon, Portugal, February 6, 1985*

*email*

[antonio.mc.alegria@gmail.com](mailto:antonio.mc.alegria@gmail.com)

*phone*

(+351) 965 558 738

*web*

[antonioalegria.com](http://antonioalegria.com)

## PROFILE

I am a Software Engineer who loves designing and building systems that make sense of data, turning them into actionable insights for people and businesses in real-time and at scale. I am thrilled about solving challenging problems in elegant and efficient ways through the use of state-of-the art tools and by having an eye for quality.

## WORK EXPERIENCE

<i>Senior Software Engineer</i>	<i>Feb 2012–Ongoing</i>	FeedZai, Lisbon	<p>Currently the tech lead coordinating implementation of international Fraud Detection pilots and of SaaS Fraud API. I have been working as a Data Scientist and a lead Engineer in building core technology used in real-time Big Data, Predictive Analytics and Fraud Detection.</p> <p>Highlights:</p> <ul style="list-style-type: none"><li>• Lead and co-developed the core data-processing and machine learning components for real-time fraud detection product. TECH: Scala, Java, Akka, Hadoop, Twitter Storm, CEP, R.</li><li>• Co-designed and implemented Predictive Analytics module for continuous, real-time time-series forecasting. TECH: Java, CEP, HTML5, Javascript.</li><li>• Responsible for certifying FeedZai Pulse with Cloudera CDH and integrating with SAP HANA, spearheading the partnership with SAP, which resulted in SAP Ventures' investment in FeedZai. TECH: Java, Flume, SQL, SAP HANA.</li></ul>
<i>Software Engineer</i>	<i>Jul 2010–Feb 2012</i>	Portugal Telecom - SAPO.pt, Lisbon	<p>Worked in the Big Data team developing event processing systems and in the Mobile Apps team as an Android developer.</p> <p>Highlights (Big Data):</p> <ul style="list-style-type: none"><li>• Designed and implemented a real-time, automatic metric aggregator for in-house KPI management system. TECH: Java, Esper, JSON, MQ.</li><li>• Maintained SAPO Alerts - a domain-independent, real-time event subscription and filtering platform used by PT and 3<sup>rd</sup> parties. TECH: Java, XML, PostgreSQL, Netty, SOAP.</li></ul> <p>Highlights (Mobile):</p> <ul style="list-style-type: none"><li>• Implemented and shipped over 5 Android Apps including SAPO News – SAPO's flagship App with over 100,000 users. TECH: Android, Java, SQLite, HTML5, Javascript.</li><li>• Spearheaded Scrum adoption.</li><li>• Proactively managed and coordinated a large part of the SAPO News mobile Apps project.</li></ul>
<i>Software Engineer</i>	<i>Sep 2008–Jul 2010</i>	Portugal Telecom, Lisbon	<p>Core developer of real-time analytics and Business Activity Monitoring system - Pulso - using Complex Event Processing (CEP).</p> <p>Highlights:</p> <ul style="list-style-type: none"><li>• Designed and implemented core CEP system in Pulso. TECH: Esper, JRuby, Java, ActiveMQ, Starling, MySQL.</li><li>• Designed and implemented domain-independent BAM patterns and rules for business process and application monitoring solutions. TECH: Esper.</li><li>• Implemented tens of real monitoring scenarios for several mission-critical business processes and applications in PT. TECH: Esper, Ruby.</li></ul>

Nov 2007–Aug 2008 Portugal Telecom, Lisbon

Developed and applied MSc research. Results were tested in three real-world Information Systems Architectures. Helped development of in-house automatic network application and infrastructure discovery 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. TECH: Logtalk/Prolog, Ruby, C and an assortment of network traffic analysis tools.
- Designed and implemented a wide range of deep packet analysis probes for enterprise application identification and error detection. TECH: C, Ruby, PADS.

Feb 2005–Jun 2006 INESC-ID - Distributed Systems Group, Lisbon

Researched and implemented ad-hoc (mesh) network applications for mobile devices using Bluetooth, RF-ID and Microsoft .Net Compact Framework.

## HIGHER EDUCATION

Nov 2009 Instituto Superior Técnico, Lisbon

Major: Software Engineering · Minor: Distributed Systems  
Thesis: “Automatic Verification of IT Architecture Models for Networked Information Systems”  
Thesis Grade: 19/20 · GPA: 17/20

Jul 2007 Instituto Superior Técnico, Lisbon

Major: Software Engineering · Minor: Distributed Systems · GPA: 16/20

## TRAINING AND CERTIFICATION

Sep 2012 IELTS General Exam

IELTS Band Score: 8.5/9

Jul 2011 Lisbon Machine Learning School

Google-sponsored international summer school.

Jan 2011 Scrum Alliance – Certificate Scrum Master

Institution: VANTAGEM+

Oct 2009 Initial Pedagogical Training for Trainers

Institution: PORTUGAL TELECOM INOVAÇÃO, SA

Jun 2002 Certificate of Proficiency in English

Institution: UNIVERSITY OF CAMBRIDGE, 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, <http://j.mp/rcis2010paper>.

## CONFERENCES & EVENTS

*Sep 2012* SAP HANA Bootcamp, Dublin, Ireland

.

*Nov 2012* Codebits VI, Lisbon

*Awarded Team*

Built a distributed slide presentation platform with support for real-time metrics and crowdsensing from mobile device sensors. Our team placed 4th in 100. TECH: Node.js, HTML5, Javascript, CSS.

.

*Nov 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

*Prog. Languages*

Java · Scala · (J)Ruby · R · Other: Javascript, C, Prolog/Logtalk

.

*Dist. Computing*

Hadoop · Twitter Storm · Akka · Scalding · Pig

.

*Messaging*

ActiveMQ · Starling/Kestrel · SAPO Broker · Flume

.

*Databases*

PostgreSQL · MySQL · Cassandra · SAP HANA · MongoDB

.

*Other Platforms*

Esper · Weka · Sinatra · Node.js

ENGLISH · Fluent

SPANISH · Competent Listening and Speaking

*Languages*

FRENCH · Competent Listening and Limited Speaking

PORTUGUESE · Native

*Interests*

Data Science · Big Data · Agile Development · Product Design · Project Management · Predictive Analytics · Fraud Detection

October 20, 2013