# Vasco Santos | Software Engineer

Rua Nova, Bloco A nº70, 5° D, Aveiro, Portugal

□ +351 925305144 • ☑ santos.vasco10@gmail.com ② vasco-santos.github.io

I consider myself to be an organized, perfectionist, as well as hard working person, with interpersonal skills for working in a multicultural team. In addition, I am a technology enthusiast, who is always looking forward to discuss and learn new technologies. My ambition is to become a great full-stack developer, capable of using the most adequate technologies for each challenge.

#### **Education**

Academic Qualifications.....

#### Master's Degree in Computers and Telematics Engineering

**Aveiro University** 

o Programming, Software Engineering, Distributed Systems, Security, Information Retrieval, DevOps, Internet of Things and Computer Networks

2011-2016

Languages

First Certificate in English

**Abrantes ILC** 

Cambridge English Language Assessment (B2)

2010

# **Experience**

#### Master's Degree Dissertation

**Telecommunications Institute** 

Secure Decentralized IoT Infrastructure

September 2015–October 2016

Aims to showcase an alternative concept for IoT Infrastructures, which focuses on enhancing the traditional centralized architecture, usually operated by a single entity, into a decentralized architecture featuring multiple business roles. Therefore, it was designed and implemented a dynamic infrastructure on top of a P2P Network. This infrastructure provides data access, persistence and streaming. It is also an important focus of this dissertation to have mechanisms that guarantee the privacy and security of the information.

#### Full-stack Developer / Researcher

Altice Labs and Telecommunications Institute

ETAPAS Project

July 2016-December 2016

This work consists of the enhancement of the SmartData Platform, which is an IoT/M2M platform that aggregates data from multiple heterogeneous sources. Shortly, new features were implemented or improved regarding data formats, web services, data privacy and graphical user interface. This platform is used in three European projects, namely FP7 UCN, Smartie and H2020 Sharing Cities.

#### Technical skills

- o Areas of Focus: Security, Distributed Systems, Web Development, Internet of Things and Big Data.
- o **Programming Languages:** Java, Python, JavaScript, C# and Bash.
- o Programming Paradigms: Object-oriented, Asynchronous, Event-driven and Functional.
- o Databases: Relational (SQL Server and PostgreSQL), Document-oriented (MongoDB and RethinkDB),

Time-series (InfluxDB) and Key-value (RedisDB).

- Frameworks and Technologies: Twisted, Django, Flask, CherryPy, NodeJS, AngularJS, React.js, jQuery, WPF, ASP.NET, Java2EE, MQTT, RabbitMQ, ActiveMQ and Apache Solr.
- o Tools: Git, Linux, Vagrant, Chef, Ansible, NGINX and Chrome Developer Tools.

## **Extracurricular Activities**

Pedagogy Section

Nucleo de Estudantes de Engenharia de Computadores e Telemática

Member of the pedagogy section of the students' union. The main objective of this section consists on organizing activities that complement the students' education.

### **Awards**

#### Member of the Semifinalist Team

Lisbon

OpenMind Esegur Prize for Inovation in the Security Field

March 2015-June 2015

Proposed an alert and confirmation service, which adds a second security factor to the authentication in existing external services with a single factor authentication. This service provides anonymity to the users, as well as configurable levels of security for each external service bound. Therefore, the users may confirm their identity through a Smartphone or an Arduino, as well as detect unauthorized authentication attempts. Team advised by Professor André Zuquete.