



Rui Barros

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PERSONAL STATEMENT

I am a self-made web developer who was born in the city of Porto, Portugal. My interest in code started during my master degree in Structural Engineering. Since then I have been acquiring knowledge and competences in web development, both by following courses, and by developing applications for industry and research environment.

My ambition is to work as a web developer and data visualization specialist, and if possible, to apply my knowledge in the risk assessment domain.

PROFESSIONAL EXPERIENCE

Researcher and IT developer

Period: October 2013 – September 2015

University: FEUP - University of Porto - Faculty of Engineering (FEUP)
Porto, Portugal

Project: PRISE – Seismic Risk Assessment of the Portuguese Building Stock

PRISE was focused on the seismic risk assessment and loss estimation (economic, human and social) of the Portuguese building stock.

Within the project tasks, several advanced methodologies, tools and models were developed, leading to an important breakthrough in the seismic risk context.

My role consisted in the management and development of all the IT tools for research activities and dissemination actions. One of the outcomes of the project is a web application called EQLogger. This is a platform that brings data visualization for real time and probabilistic assessment of earthquake consequences in Portugal. It provides interactive maps and charts that allow entities such as the Civil Protection to make decisions in the case of a disaster. The platform is available through this link: prise.fe.up.pt/eqlogger.

This platform was developed in close collaboration with the team of developers of the international partner of the project GEM – Global Earthquake Model, in Pavia, Italy. This foundation is one of the most recognized institutions in earthquake risk engineering worldwide.

Administrative Assistant

Period: August 2010 - August 2012

Company: Short Connection - short-connection.com
Porto, Portugal

This job was a part-time job that I had during the university. I worked as a ticket clerk in FC Porto Stadium and also in other stores of the club. I also worked in telemarketing in the commercial department of the club.

EDUCATION

Informatics Engineering degree

Period: September 2015 – Current (Post-Laboural)

University: Polytechnic of Porto - School of Engineering (ISEP)
Porto, Portugal

Although I have been working on this area for some time, this degree is giving me consolidation of the knowledge that I had, and the opportunity to learn new technologies.

Master's Degree in Civil Engineering

Period: September 2008 – September 2013

University: University of Porto – Faculty of Engineering (FEUP)
Porto, Portugal

In these five years I have acquired technical knowledge that gave me a way of thinking that helps me on the approach of any challenge, but more important that, it was what I learnt outside of the classroom what I consider the most important. Being part of the students association for three years, going abroad for an Erasmus program, and complete this degree with a master thesis theme not very common, definitely mold me as a professional.

Despite my specialization in structural engineering, I also had formation in other fields of civil engineering such as constructions or geotechnics. I finished with a B classification in the ECTS grading system (14/20 values).

The last chapter of my passage on this university was my master thesis, with the title: "Development of a web service for the calculus of steel structures". It was a pleasure to accomplish this work, because I had the opportunity to merge my passion for web development, with the knowledge that I acquired in structural engineering. The result is available here: openg.fe.up.pt/flangeplusweb2.0

FEUP Students Association

Period: July 2009 – July 2012

During my time in the University of Porto I was involved in many initiatives related to student associativism, representing the Students Association of FEUP (AEFEUP). I have learnt from being leaded, to then lead teams to accomplish the association goals. Over these three years I have been responsible on the organization of many events and activities. In my last year as a member, I assumed the position of vlce President and represented institutionally AEFEUP in many encounters, such as the faculty pedagogic council, and many other relevant meetings.

Erasmus Program

Period: September 2012 – February 2013

University: Polytechnic University of Catalonia
Barcelona, Spain

Regardless the academic profit, during this period I had the opportunity to deal with people from many different cultures everyday, and to learn new languages such as Spanish and Catalan. It was a remarkable experience, in which I had to leave my comfort zone.

Online Courses

- [Introduction to computer science](#) (Udacity);
- [Web development](#) (Udacity);
- [Javascript](#) (CodeAcademy);
- [A better way to learn AngularJS](#);
- [Django](#).

Other courses and workshops

- Git;
- MongoDB;
- Databases;

HARD SKILLS

- Python web frameworks (Django, Flask);
- Python scientific libraries (Numpy, Scipy, Matplotlib);
- SQL, (PostgreSQL, PostGIS);
- HTML5;
- Javascript frameworks/libraries (AngularJS, JQuery, BackboneJS);
- Javascript maps (Leaflet, Google maps API);
- Javascript charts (Highcharts, ChartJS);
- Git;
- CSS3, Bootstrap;
- QGIS;
- Excel.

PERSONAL INTERESTS

Every time I'm on vacations, I always try to go somewhere I have never been before. So, I can say that my favourite hobby is to travel. I also love to play football and tennis with friends.