

Pedro Miguel G.D.S. Assunção

PDF version

+351 932 289 513

pedro@pedroassuncao.com

<https://pedroassuncao.com>

@github

 LinkedIn

Professional Experience

Since December
2017

DROVER

Tech Lead / Senior Software Developer / Architect at Drover
Portugal/UK

Making sure the code base is consistent across all development teams, championing best practices and design strategies. Introducing new ways to make developers' lives easier by procuring tools for all aspects of code health, security and performance. Architecture and prototyping of micro-services with the long term goal of splitting up code into more manageable and testable pieces.

Stack includes Elixir, Rails and many more shiny things. <http://joindrover.com>.

Tools and Technologies

Ruby on Rails, Elixir, Phoenix Framework, Broadway, SQS, SNS, Jenkins, Docker, Git, Emacs, PostgreSQL, HTML, Json, Elastic Search, React JS, PubSub

August 2017 -
December 2017



Senior Ruby/RoR Developer at Wordans.com
Portugal

Supporting existing and developing new features for Wordans' online marketplace:
<http://wordans.com>

Tools and Technologies

Ruby on Rails, Git, Emacs, PostgreSQL, HTML, Json, Elastic Search

November 2015 -
August 2017



Senior Ruby on Rails developer at Portugal Telecom (via BOLD Int.)
Portugal

Development of various internal systems (and support gems) with RoR, using MySQL, RabbitMQ. Everything extensively based on automated testing, pair programming, and git blaming :)

Maintenance of the identity and access management systems responsible for providing systems accesses for the entire organization. Development of solutions for those same systems.

Tools and Technologies

Ruby on Rails, Jenkins, Git, Emacs, MySQL, HTML, Json, Elastic Search, RabbitMq, React JS, PubSub, Mina, Capistrano



January 2012 -
November 2015



Co-founder and jack-of-all-trades at ZenBlast, LDA Portugal

Ruby on Rails platform to manage the cultural and sports group of a major Portuguese bank (BPI);

Invoicing application "VOS", which includes modules for accounting, stocks, salaries, medical clinics management, and more;

Development of a dropzone management software application, to handle schedules and passenger manifest at any parachuting operations site;

Development of other custom-made software applications and websites.

Tools and Technologies

Java, Hibernate ORM, Spring framework, TestNG, Mac OSX, PostgreSQL, H2, SQL, Javascript, CSS, HTML, XML, Eclipse IDE, Ruby on Rails, RubyMine, Mercurial, Maven

November 2006 -
December 2011



Junior/Medior/Senior Software Developer at TomTom Int. B.V. Amsterdam, Netherlands

PND Content Server and Map shop release system

Maintaining the old map shop release system and PND content server (i.e. home server) and working on developing the next generation of the same products.

Mobile Location Based Services

Short stop through the Mobile department. Though only a month, this project provided some insight on location based services, namely routing and geocoding of addresses, and development on mobile platforms (Midlets). Went back to the old department due to some company internal project restructuring.

MapShare back-end server

One of the original developers of TomTom [MapShare](#) technology's back end server. This system is responsible for the storage, processing, and distribution of map and POI (points of interest) corrections to it's more than 20 million users. This was TomTom's most important project in 2007.

Adopting the Scrum agile methodology from the start, was responsible for the design and implementation of the entire solution (backend server and a web interface where TomTom content moderators can manage incoming corrections), along with 2 other team members.

As with all server-side projects, the solution had to tackle the usual performance and scalability challenges, as well as the immense amounts of handled data. The answers to these issues were translated into the following:

- **Database tweaking** - Some particular parameters had to be tweaked in order to make the most out of our database cluster.
- **Read/Write connection splitting** - To take advantage of a cluster (master/slave replication) this had to be implemented. In this case, at the application level (custom data source RW splitting module).
- **Connection data streaming** - Some tweaking had to be performed in order for the database to stream the results to the application, instead of building it up in memory on the database driver. We went one step further and implemented streaming from the DB directly to the HTTP clients (minimal memory footprint on the server).
- **Data distribution caching** - All the optimizations on a database cluster will

eventually prove less fruitful than a proper caching strategy so we also implemented this, though using an out-of-the-box solution.

Was also responsible for the creation of other smaller tools (testing, load/stress runs, etc.), some Python scripts for performance measurement and charting of results, and a maven plugin for the generation of a SQL schema from Hibernate annotations.

MapShare reporting tool

Sole responsible for the design and implementation of a data aggregation and reporting tool for the MapShare backend server's data. This project was born from the management's need to monitor and get information about the current status of the project, namely the number of users sharing corrections, what kind of devices are sharing data, how much data is being shared, what type of corrections are more common, etc.

This tool consisted on scheduled data aggregators, that retrieved information from the live MapShare system and stored it in a processed/aggregated form, and a web interface - where management could see the aggregated data and generate Excel reports from it.

Safety camera moderator's web console

In the same team that developed MapShare, was responsible for the design and implementation of a new (web) version of the TomTom safety cameras moderation tool. This tool allows TomTom content moderators to manage safety (speed) camera information, basically deciding what will end up in user's devices.

This project relied intensively on Ajax, around an openlayers map interface, when moderators could view, change, import, and export information on safety cameras that was previously gathered from several sources.

Tools and Technologies

Java, Hibernate ORM, Spring framework, JUnit, JBoss application server, Eclipse IDE, Linux, Mac OSX, MySQL, SQL, MS SQLServer, Javascript, Openlayers, CSS, HTML, Subversion, Git, Maven, XML, J2MEPolish, J2ME, Ant, Python, Squid proxy, JMeter

February 2006 -
November 2006

Associate Consultant at Infosistema Portugal

Santander Bank website's modernization



One of the developers responsible for the redesign of the home banking website of one of the company's clients (Santander/Totta Bank). This included new features, according to new services offered by the bank to its customers, a new web layout, and the integration with an existing CMS.

Also responsible for the development of a new web application, targeting customer investments - for both home users and companies. The development of this application included integration with one of Infosistema's core products, a connector to retrieve stock quotes from Reuters.

Tools and Technologies

Java, SQL, JSPs, Servlets, HTML, CSS, Javascript, Ajax, Oracle, Eclipse IDE, Netbeans IDE, JCompiler IDE, CVS, WinMerge

June 2005 -
January 2006

Junior Developer at Sinfic Portugal



Republic of Angola's Voting Census Software

One of the three core developers of the Republic of Angola's voting census software applications, put into production in November of 2006. More than 7.5 million of Angola's inhabitants registered themselves using the new electronic census framework.

Other software applications developed included one to allow an Angolan province's govern (Huila) to keep a register of the region's farms and crops, as well as some other in-house software products.

Tools and Technologies

C#, Visual Basic, SQL, Windows forms, Canon digital camera API, Microsoft fingerprint reader driver and API, Microsoft SQLServer, Microsoft SourceSafe, Microsoft Visual Studio 2005

April 2005 - May 2005

Freelance Analyst/Designer/Developer at Centro Social de Palmela Remote



Website design and implementation

Design and implementation of a website for the Social Centre of Palmela (<http://www.cspalmela.org>), a non-profit social care institution, comprised of several child-oriented services, for children older than 3 months, like hobby workshops, psychological support, etc.

The PHP content management system Joomla (previously known as Mambo) was used for the implementation of the website (<http://www.joomla.org>).

Tools and Technologies

Mambo content management system, PHP, CSS, HTML, Javascript

March 2005 - April 2005

Freelance Analyst/Designer/Developer at AnimePaf Remote



Website design and implementation

Design and implementation of a website for the Anime - Projecto de Animação e Formação organization (<http://www.animepaf.org>) using the Post-Nuke content management system (<http://www.postnuke.com>).

Tools and Technologies

Post-nuke content management system, PHP, CSS, HTML, Javascript

Education

2002 - 2005



Major in Computer Science

Major in Computer Science Engineering - Management Area, at Escola Superior de Tecnologia de Setúbal. Final score of 12 (0-20).

The final year project consisted in the creation of an ORPGs (On-line Role Playing Games) development framework. Also, a paper about the idea was submitted (and accepted), and a poster was presented, at the Level Up 2003 conference (International Conference on Digital Games Research) in Utrecht, the Netherlands

(International Conference on Digital Games Research) in Utrecht, the Netherlands.
This project achieved a final score of 17 (0-20).

1998 - 2002



BsC in Computer Science

BsC in Computer Science Engineering - Management Area, at Escola Superior de Tecnologia de Setúbal. Final score of 12,41 (0-20).

Final year project for the BsC in Computer Science Engineering, which consisted in the creation of a virtual community, for Portuguese martial artists, and all required services like news, events, discussion forums, information directories, etc. This project achieved a score of 20 (0-20).

Several projects developed using the Java programming language, including:

- Implementation of lexical and syntactic analyzers;
- Software applications based in Enterprise Java Beans;
- Agent and multi-agent based systems;
- Implementation of artificial intelligence algorithms.

Programming and development in Linux, mostly in C/C++, using multimedia development technologies (for example, SDL - <http://libsdl.org> and OpenGL).

Development of software projects using database management systems, including Oracle, MySQL and SQLServer.

Design of various websites using server side technologies like Active Server Pages (ASP), Java Server Pages (JSP), Servlets, PHP Hypertext Preprocessor (<http://www.php.net>). Good understanding of most Web technologies (HTML, Javascript, Cascading Style Sheets (CSS), etc.).

1995 - 1998



High school graduation

Electronics

High school graduation in the Electrotechnic/Electronics course at Escola Secundária Manuel Cargaleiro.

Final score of 12,40 (0-20).

Research

1999 - 2005



MaDlabs - Multimedia and DB Laboratories

Founding member of this research group from the Escola Superior de Tecnologia de Setúbal school, having developed several projects, including the new group website

(no longer online), the creation of a website for the Naval Club of Lisboa and the development of a support platform for the group teachers.

Administrator of the group's several Linux web, mail, and ftp servers, also providing support in the management of the group's currently used groupware platform (GForge - <http://www.gforge.org>).

Languages

- Excellent written and spoken English skills. Daily usage, for research and development purposes, of English technical manuals, books and magazines;
- Rudimentary written and spoken French and Spanish skills.

Hobbies

- Gaming
- Guitar and drums
- Paragliding
- Sailing
- Former wingsuit pilot, skydiving instructor, and base jumper wannabe

Additional Information

- Driver's license (Portuguese AP Class - Motorcycles) issued in 31/11/2005;
- Driver's license (Portuguese B Class - Cars) issued in 04/01/2002.

References



António Leonardo
Senior Software Developer
at Drover

December 18, 2019, Pedro
worked with António in the
same group

Pedro is a great developer, with very high work standards. His work has extremely high quality and he is always really helpful and respectful of his colleagues, regardless of seniority. He always tries to implement the best solution possible for every problem he faces within a reasonable time frame. P... [See more](#)



Cirilo Zenóglio
Devops engineer

October 14, 2017, Pedro
worked with Cirilo in the same
group

What I like most about Pedro is his incredible team spirit, solving problems with him is very rewarding, he has passion, intelligence and integrity. He's a web expert with the strength and charisma to lead big projects.



Paula Sequeira
Sr Manager, Software
Development Engineering
at Workday

September 6, 2017, Paula
managed Pedro directly

Pedro is an incredible developer and a truly committed team member. He is intelligent, highly skilled and experienced in developing high quality software. Pedro clearly contributes to the global team progress with his willingness to implement new work methodologies, ensuring an overall impr... [See more](#)



Mark Rotteveel
Software Engineer at
bol.com

February 10, 2012, Pedro
worked with Mark in the same
group

For two years I worked with Pedro, in that time I got to know him as a great developer on the job and a nice, sociable guy off the job.



Stephen Chasey
Senior Project Manager at
TomTom

February 7, 2012, Pedro
worked with Stephen in the
same group

Pedro was a core member of one of the greatest teams I have ever worked with. He has a great work ethic, and has proven himself in crisis situations. Pedro's excellent communication skills make him a valuable contributor whether he is local or telecommuting, working collaboratively or solo. Mo... [See more](#)



Michiel Trimpe
Technology Consultant

February 11, 2011, Pedro
worked with Michiel in the same
group

Pedro is beyond all doubt a great guy; he was the first person I worked with at TomTom and he gave me a very welcome introduction. Although we had some stormy weathers later during a heavy reorganization; over time I grew to respect his work more and more. He is one of those guys that ... [See more](#)



Emanuele Francioni
Founder, Director and Tech
Lead at Dusk Network

February 2, 2011, Emanuele
managed Pedro directly

Pedro is one of the best developer I've been the pleasure to work with. Highly skilled in all aspect of software development, there is no question technologically wise he doesn't know the answer of. His enthusiasm and supportive mindset would be a valuable addition in every team. I simply can't reco... [See more](#)

More recommendations at <https://www.linkedin.com/in/assuncas/>