João Azevedo

Software Engineer
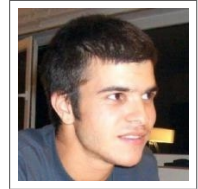
Vila Nova de Gaia
Porto, Portugal
✆ *(+351) 91 084 25 79*
✉ *joao.c.azevedo@gmail.com*
⌂ *http://jcazevedo.net/*

Experience

2012–   **Software Engineer**, *ShiftForward*, Porto, Portugal.

2011–2012   **Researcher**, *Fraunhofer AICOS*, Porto, Portugal.

Designed and developed the new version of Mover, an application to promote mobility among elder people. Implemented the mobile frontend in Android and the backend in Ruby on Rails. Developed several signal analysis tools in Java for Dance! Don't Fall, a dancing game for elders that was ranked in the top 25 apps in the Mobile Apps Showdown of CES 2012. Researched various state-of-the-art technologies, protocols, norms and standards to be used within the AAL4ALL project, a project aiming to develop an ecossystem of products and services for Ambient Assisted Living associated to a business model and validated through a large scale trial. Researched machine learning techniques for time series analysis, focused on the problem of fall detection and activity classification.

2010–2011   **Software Engineer**, *SISCOG*, Lisbon, Portugal.

Implemented several new features and performed corrective maintenance in a crew-scheduling application for VR, a Finnish railway company. Wrote several specifications for new features to be implemented. Performed various code reviews. Developed solutions to enable the integration of git as a version control system in the company's workflow and to automate some of the company's internal processes. Worked mainly with Common Lisp and the Common Lisp Object System.

2009–2010   **Student Researcher**, *Faculdade de Engenharia da Universidade do Porto*, Porto, Portugal.

Designed a module based architecture for a configurable Inductive Logic Programming system development environment. Developed a small working prototype using Java and Prolog. Wrote a module for the YAP high-performance Prolog compiler to enable the access to R-project facilities from within the Prolog engine.

2007–2010   **Software Developer**, *IMAGE*, Porto, Portugal.

Made part of the development team of the browser-based game IMAGE - Industrial Management Game, started on the PESC (Projectar, Empreender e Saber Concretizar) projects initiative at Faculdade de Engenharia da Universidade do Porto. Worked mainly on the Ruby on Rails backend that supported the game, both by introducing new features and refactoring a legacy codebase. Made part of the selection process for new students to integrate the project.

2010   **Undergraduate Teaching Assistant**, *Faculdade de Engenharia da Universidade do Porto*, Porto, Portugal.

Supported first-year students in a Programming course. Provided assistance on the doubts the students had regarding the coursework on practical classes. Taught basic object-oriented programming with C++. Wrote the assignments for the semester.

2009	**Junior Engineer**, *Critical Software, S.A.*, Coimbra, Portugal.
	Developed a solution to support software reuse in the company's projects, unified with the current infrastructure regarding the version control systems and the intranet's information system. Worked mainly with Java, using the Stripes framework, and MSSQL.
2009	**Undergraduate Teaching Assistant**, *Faculdade de Engenharia da Universidade do Porto*, Porto, Portugal.
	Supported first-year students in a Programming course. Provided assistance on the doubts the students had regarding the coursework on practical classes. Taught basic object-oriented programming with C++. Wrote the assignments for the semester.
2008	**Undergraduate Teaching Assistant**, *Faculdade de Engenharia da Universidade do Porto*, Porto, Portugal.
	Supported second-year students in a Computer Graphics course. Provided assistance on the doubts the students had regarding the coursework on practical classes. The main technologies involved were OpenGL with C++ and Java Swing.

Education

2005–2010	**Integrated Masters in Informatics and Computing Engineering**, *Faculdade de Engenharia da Universidade do Porto*, Porto, Portugal.
	Grade average of 18 out of 20
2002–2005	**Secondary Education – Natural–Scientific Option**, *Escola Secundária de Carvalhos*, Vila Nova de Gaia, Portugal.
	Grade average of 18 out of 20.

Independent Coursework

2014	**Algorithms: Design and Analysis, Part 1**, *Stanford University*, Coursera.
	Online course lectured by Tim Roughgarden.
2013	**Principles of Reactive Programming**, *École Polytechnique Fédérale de Lausanne*, Coursera.
	Online course lectured by Martin Odersky, Erik Meijer and Roland Kuhn.
2012	**Functional Programming Principles in Scala**, *École Polytechnique Fédérale de Lausanne*, Coursera.
	Online course lectured by Martin Odersky.
2012	**Machine Learning**, *Stanford University*, Coursera.
	Online course lectured by Andrew Ng.

Languages

Portuguese	**Fluent**
English	**Professionally fluent**

Computer skills

Programming Languages	C, C++, Java, Scala, R, Common Lisp, Prolog, Scheme, PHP, Ruby, JavaScript
Markup Languages	XML, XHTML, LaTeX, CSS
Database Management Systems	MySQL, PostgreSQL, Microsoft SQL Server
Revision Control Systems	CVS, Subversion, Git
Frameworks and Technologies	Android, OpenGL, Hibernate, Java Swing, Stripes, Ruby on Rails, Common Lisp Object System

Publications

2013 Nicos Angelopoulos, Vítor Santos Costa, João Azevedo, Jan Wielemaker, Rui Camacho and Lodewyk Wessels, *Integrative functional statistics in logic programming*, Proceedings of the 15th International Symposium on Practical Aspects of Declarative Languages (PADL'13). Rome, Italy.

2009 João Azevedo, Miguel Oliveira, Pedro Pacheco and Luís Paulo Reis, *A Cooperative CiberMouse@RTSS08 Team*, Proceedings of the 14th Portuguese Conference on Artificial Intelligence: Progress in Artificial Intelligence (EPIA'09). Aveiro, Portugal.

Academic Honors

- "Prémio Incentivo" in 2005/2006, awarded by University of Porto to the best students finishing the first year of its courses.
- Merit scholarships in 2006/2007, 2007/2008 and 2008/2009, awarded by "Faculdade de Engenharia da Universidade do Porto" to the top students of all courses.
- "Prémio Companhia Portuguesa de Computadores, Informática e Sistemas" in 2009/2010, awarded by "CPCIS - SGPS - Companhia Portuguesa de Computadores, Informática e Sistemas" to the student with the best grade average of the Integrated Masters in Informatics and Computing Engineering at Faculdade de Engenharia da Universidade do Porto.
- 4th, 3rd and 2nd places, in 2007, 2008 and 2009, at TIUP ("Torneio Inter-Universitário de Programacão"), as a member of the Divide_N_Conquer (2007 and 2008) and Theorem (2009) teams.
- 3rd, 4th and 2nd places, in 2007, 2008 and 2009, at MIUP ("Maratona Inter-Universitária de Programacão"), as a member of the Divide_N_Conquer (2007 and 2008) and Theorem (2009) teams.
- Two 2nd places, in 2007 and 2008, at CPUP ("Concurso de Programac ao da Universidade do Porto"), as a member of the Divide_N_Conquer team.
- 11th, 24th and 19th places, in 2007, 2008 and 2009, at SWERC (South Western Regional ACM Programming Contest), as a member of the Divide_N_Conquer (2007 and 2008) and Theorem (2009) teams.
- 4th place, in 2008, at the CiberRato contest.
- 5th place in Portuguese's Microsoft Imagine Cup 2010 Software Design Contest.

Interests

Photography	Amateur photographer
Science-Fiction	Reader of science-fiction novels.
Music	Fond of alternative and indie music.