

# Luiz Felipe Machado da Silva

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## Summary

A pragmatic and pro-active full-stack C#, .NET framework and dotnet core developer with over 10 years professional experience. Thrives on technical challenges, very technology-curious and self-motivated to continue picking up new skills. Enthusiastic for agile methodologies, architecture and performance. Pluralsight subscriber and general spare-time coder.

## Employment History

**Company: Altran** ([www.altran.com](http://www.altran.com))

### Project: Philips MultiOne

**Position: Senior Consultant Engineer (Full-Time), June 2017 until now**  
**Advanced Consultant Engineer (Full-Time), January 2017 - June 2018**

The MultiOne project consists of developing tools for factories to configure all of Philips Lighting's programmable driver portfolio. More information about MultiOne can be found at: [www.philips.com/multione](http://www.philips.com/multione)

At Altran I have been working as a C# .Net software engineer within the outsourced project from Philips Lighting in partnership with Altran Netherlands.

*Key Technologies:* C#, .NET 4.6.1, dotnet core, Winform, WPF, NUnit, Specflow, TestLink, SonarLint, Resharper, SVN, Jira, Scrum, Balsamiq and Jenkins.

#### Highlights:

- Responsible/Leader Portugal team Leader.
- Improve and implementation of a new software architecture.
- Maintenance and implementation of new features.
- Migrate from Winform/WPF features to web.

**Company: Tecgraf** ([www.tecgraf.puc-rio.br](http://www.tecgraf.puc-rio.br))

The Tecgraf Institute of Technical-Scientific Software Development of PUC-Rio (Tecgraf/PUC-Rio) stands out in the national and international scenario by developing innovations on computer systems applied to all areas of the petroleum production chain, mostly in cooperation with Petrobras. These innovations are based, predominantly, on researches conducted in partnership with the Academic Departments of PUC-Rio.

### Project: PUMA

**Position: Lead Software Developer (Full-Time), May 2016 - October 2016**

PUMA is a systems for logistic planning control and monitoring of oil supplies based on stock control; oil allocation in refineries; selection of logistic infrastructure projects to be implemented. Planning and monitoring of logistic network, from starting material extraction, going through processing, to the distribution of end products in consumer markets.

*Key Technologies:* C#, .NET 4/4.5, Winform, Oracle, Entity Framework, Ninject, NUnit, SOAP, WSDL, Git, Jira and Scrum.

*Responsible for:*

- Understanding the customer needs to automate recurrent manual processes.
- Developed of components using Winform to increase team productivity.
- Using Entity framework 6.0 to access Oracle database.
- Developed of a complex MOCK system to help unit test.
- Developed routines to automate the engineering process.
- Web service using WSDL / SOAP to communicate with SAP service.
- Improve the architecture using the book of [Scott Millett \(Professional ASP.NET Design Patterns\)](#) as reference.

**Project: Anflex** ([www.tecgraf.puc-rio.br/pt/software/sw-anflex.html](http://www.tecgraf.puc-rio.br/pt/software/sw-anflex.html))

**Position: Intern (Part-Time), 2008 - 2011**

**Software Developer (Full-Time), 2011 - 2015**

**Lead Software Developer (Full-Time), 2015 - 2016**

Systems for projects of risers, mooring for ships, and floating platforms. Tools for establishing the dimensions and configuration of a riser, so it can endure unfavorable environmental actions. Nonlinear analysis, static and dynamic, deterministic and random, through finite elements method, models for flexible rises, (such as rigid in catenary and mixed), mooring lines and TPL platform tendons. Graphic interfaces for data generation of numerical processing and results visualization.

*Key Technologies:* C, C++, STL, Lua, IUP, QT, OpenGL, GLSL, HDF5, Desktop Application Development, SVN, Jira, Kanban.

*Responsible for:*

- Promoted and developed the use of Lua as a scripting language to automate procedures in C/C++.
- Developed several parallel routines using pthread.
- Refactoring old Fortran projects (physical simulation and finite element) to C++.
- BSc Final Project - [Rendering Photorealistic Offshore Models](#). Development of computational geometry algorithms like LOD (low of detail), frustum culling, ray tracing, volumetric shadows and others.
- Refactoring all mesh render using a newer API OpenGL 3.3 and Shader - [link](#).
- Development of a plot library of one or more datasets.
- Using HDF5 files to manipulate massive volume of data.
- Training courses on how to use the program for new engineers.
- Interface between the programmers and director, having ownership of development plans and having supervisory responsibilities in delegating work ensuring that software project come in on time.

**Personal Project: MyExpenses** ([github.com/lfmachadodasilva/MyExpenses](https://github.com/lfmachadodasilva/MyExpenses))

MyExpenses is a concept project to control my personal expenses and study new techniques.

*Key Technologies:* Web, C#, Dotnet Core, Entity Framework Core, MSTest, Microsoft Dependency Injection, DDD, Git, Kanban, Appveyor, Codacy and Codacy.

## Education

2007 - 2011, PUC-Rio (Pontifical Catholic University of Rio de Janeiro) ([www.puc-rio.br](http://www.puc-rio.br))

**Bachelor's degree in Computer Information System**

2009 - 2011, PUC-Rio (Pontifical Catholic University of Rio de Janeiro) ([www.puc-rio.br](http://www.puc-rio.br))

**Teacher Assistant** in subject as Programming I (beginning), Programming II (moderate), Advanced Data Structures (advanced) and Computer Graphics.

## Interests

- Fascinated by new technologies such as pebble, raspberry pi and internet of things.
- Interested in keeping up to date on news programming languages and frameworks.
- Enjoy music, films, TV shows and podcasts.