

# CURRICULUM VITAE

## Personal Information

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**Name:** Bruno Siqueira Campos Mendonça Vilar.

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## Professional Goal

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My goal is to continuously improve my ability to work as Data Scientist and Researcher. To achieve this goal I am investing on courses and studies to complement my academic background, especially on the areas of Data Analysis, Data Mining and Machine Learning.

## Education

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Doctor of Philosophy (Ph.D.) (2009 - 2014)

**Course:** Computer Science. State University of Campinas (UNICAMP). Campinas/SP, Brazil.

**Dissertation:** Context driven Workflow Adaptation Applied to Healthcare Planning.

Master's Degree (2007 - 2009)

**Course:** Computer Science. State University of Campinas (UNICAMP). Campinas/SP, Brazil.

**Thesis:** Ontology based Query Processing for Biodiversity Systems.

Bachelor's Degree (2002 - 2006)

**Course:** Information Systems. Centro Universitário Luterano de Palmas (CEULP/ULBRA). Palmas/TO, Brazil.

**Thesis:** A Framework to the Development of Adaptive Systems based on Ontologies.

## Complementary Education

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Coursera Specialization (01/2015 - 10/2015)

**Course:** Data Science. Johns Hopkins University, via Coursera.

**Modules:** Completed 8 modules of 10. One in progress.

Certification (07/2015)

**Course:** Scalable Machine Learning, BerkeleyX, via Edx.

Certification (06/2015)

**Course:** Introduction to Big Data with Apache Spark, BerkeleyX, via Edx.

Certification (03/2015 - 05/2015)

**Course:** The Analytics Edge, Massachusetts Institute of Technology, via Edx.

Certification (01/2015 - 02/2015)

**Course:** Statistics and R for the Life Sciences. Harvard School of Public Health, via Edx.

## Languages

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Portuguese

## **Native Speaker.**

### English

**Advanced:** Experience writing and presenting scientific papers. Currently using English to perform all written communication and write technical documents.

## **Professional Experience**

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### Eldorado Research Institute – Project 2 (Brasília/DF, 06/2015 – actual)

**Site:** <http://eldorado.org.br>

**Experience:** Working as a data analyst in an Internet of Things project. The project involves the use of distributed computing frameworks, Data Mining and Machine Learning techniques to identify patterns relevant to the application. Among my responsibilities, I develop algorithms, conduct experiments, perform data analysis and act as research leader, making decisions and guiding research plans.

**Technologies:** R, Java, Machine Learning, Data Mining and Distributed Computing Frameworks.

### Eldorado Research Institute – Project 1 (Brasília/DF, 06/2014 – 01/2015)

**Site:** <http://eldorado.org.br>

**Experience:** Worked as data analyst using social media data. Part of the social media's data was processed as graph, allowing us to compute metrics based on people's relationships. Information retrieval and MapReduce algorithms were used to perform recommendation of messages based on similarity and to detect relevant information to the application.

**Technologies:** Java, Neo4j, ASP.NET MVC, Node JS, Hadoop, SVN, HTML5, JavaScript and JSON.

### Aldeia Tecnológica (Palmas/Tocantins, 01/2006 – 06/2007)

**Site:** <http://www.aldeiatecnologica.com.br>

**Experience:** Team manager and software analyst. The company was founded by three undergrad professors from CEULP/ULBRA who invited me to join the board and develop a project.

**Technologies:** Java, J2EE, SVN, Oracle Application Server, Oracle Database, HTML, XML, JavaScript (jQuery) and CSS.

### CEULP/ULBRA's IT Advisory (Palmas/Tocantins, 01/2006 – 06/2007)

**Site:** <http://www.ulbra-to.br>

**Experience:** Management and development of CEULP/ULBRA project's, including those from the main web site and internal systems used by the board of directors.

**Technologies:** *Microsoft .NET Framework 1.1/2.0*, ASP.NET, C#, ASP, XHTML, XML, CSS and MS SQL Server 2000/2005.

### CEULP/ULBRA's Portal (Palmas/Tocantins, 07/2003 – 06/2005)

**Site:** <http://www.ulbra-to.br>

**Experience:** Development of dynamic web sites to meet the internal needs of CEULP/ULBRA and manage the institutional portal. One of the main projects in which I was involved was AVALNET, focused on the institutional assessment performed by thousands of students of ULBRA, from the North and Midwest of Brazil.

**Technologies:** *Microsoft .NET Framework 1.1/2.0*, ASP.NET, C#, ASP, XHTML, XML, CSS and MS SQL Server 2000/2005.

### Tecnoplace – Technology and Connectivity (Palmas/Tocantins, 02/2002 – 02/2003)

**Site:** <http://www.tecnoplace.com.br>

**Experience:** Documentation, test and support of dynamic websites developed by the company. Initially the work was performed as a volunteer. Afterwards joined the undergraduation course, I was incorporated as a trainee.

**Technologies:** ASP, MS Access, VBScript, HTML, JavaScript and CSS.

## **Honors & Awards**

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XVIII Brazilian Symposium on Computer in Education – SBIE 2007

**Third place** in the Final Degree/Master project and Doctoral Consortium (CTD-IE) for the Bachelor's thesis.

Annual Congress of Information Technology – CATI 2006, FGV-EAESP

**Honorable Mention** for the work “Educational System from Semantic Web Concepts”.

IV Congresso Científico e V Jornada Científica, CEULP/ULBRA (2005)

**Second place** at Young Researcher Award for the work “Developmento of the Editor for Quantificational Logic Formulas stored in XML”.

## **Scientific and Technological Production**

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Publications Summary

**Papers:** 9.

**Expanded Abstracts:** 8.

**Working themes:** Semantic Web, Ontologies, Workflows, Meta-Programming, Adaptive Hypermedia and others.

**Technologies involved:** ASP.NET, C#, Java, Jena API, DOM API, OWL, RDF, XML, SVG, LOM, and others.

Main Scientific Papers

- VILAR, Bruno S. C. M. ; MEDEIROS, Claudia M. B.; SANTANCHÈ, André. **Using Healthcare Planning Features to Drive Scientific Workflows on the Web.** In: 10th International Conference on Web Information Systems and Technologies – WEBIST, 2014, Barcelona.
- VILAR, Bruno S. C. M. ; MEDEIROS, Claudia M. B.; SANTANCHÈ, André. **Towards Adapting Scientific Workflow Systems to Healthcare Planning.** In: International Joint Conference on Biomedical Engineering Systems and Technologies – HEALTHINF/BIOSTEC, 2013, Barcelona.
- Joana G. Malaverri ; VILAR, Bruno S. C. M. ; CLAUDIA, M. B. M. . **A Tool Based On Web Services To Query Biodiversity Information.** In: 5th International Conference on Web Information Systems and Technologies – WEBIST, 2009, Lisboa.
- VILAR, Bruno S. C. M. ; CLAUDIA, M. B. M. . **Processamento Semântico de Consultas para Sistemas de Biodiversidade.** In: VII WTDBD - Workshop de Teses e Dissertações em in Proc. XXI Simpósio Brasileiro de Banco de Dados, 2008, Campinas. XXI Simpósio Brasileiro de Banco de Dados, 2008.

## **Extracurricular Activities**

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Volunteer work at Mozilla Foundation (10/2013 – actual)

**Experience:** Working on several activities, such as Marketing, Bug Fixing, User Support, and Localization.

**Technologies:** JavaScript, HTML, CSS and FirefoxOS.

**Reference:** <http://mozillians.org/pt-BR/u/brunovilar/>

#### Text production for blogs

FreeBird - A blog created with a graduate colleague to present data about mobile and free technologies - <http://freebird.blog.br>

The experience resulted on invites to write for mainstream blogs (Meio Bit and Tech Tudo) and was object of study for a PhD research in Linguistics.

#### Teaching Internship

- Databases: Theory and Practice, 08/2013-12/2013, UNICAMP.
- Algorithms and Computer Programming, 08/2011-12/2011, UNICAMP.
- Data Structures I and Data Structures II, 02/2004-06/2004, CEULP/ULBRA.
- Data Structures I, 07/2003-11/2003, CEULP/ULBRA.

#### Scientific and Technological Initiation programs

- "The OWL language in the development of an ontology for the domain 'Digital Library of articles, monographs, dissertations and theses'", CEULP/ULBRA, Palmas - TO, 04/2005 - 12/2005.
- "Development of a System for Resolution and Presentation of Theorems' Proof Steps for Quantificational and Equational Logic", CEULP/ULBRA, Palmas - TO, 06/2004 - 12/2004.

#### Participation in Scientific and Technological

- Caipira Ágil 2013 - Campinas, SP.
- Microsoft and FAPESP Latin American eScience Workshop 2013 - São Paulo, SP.
- EMC Summer School on Big Data. 2013 - Rio de Janeiro, RJ.