## Francisco Demontiê dos Santos Junior

1075, Rua Tomé de Souza Savassi, Belo Horizonte, Minas Gerais 30140-130 Brazil

Phone: +55 (31) 99420 7930 demontiejunior@gmail.com http://demontiejr.com

#### **Education**

M.Sc. Computer Science, Federal University of Minas Gerais (UFMG), Brazil. 2014 – 2016. GPA.: 3.7 / 4 B.Sc. Computer Science, Federal University of Campina Grande (UFCG), Brazil. 2009 – 2013. GPA: 3.5 / 4

# **Experience**

- Feb 2016 Jul 2016: **Software Engineering Intern, Google**, Belo Horizonte, MG, Brazil. Developed a BMI Calculator, on the search page, that triggers for queries like [bmi calculator]. Also worked on a data mining project (using a framework similar to MapReduce). Using C++, Java, JavaScript, HTML, Bash Script.
- Sep 2013 Jan 2014: **Software Engineer, Distributed Systems Laboratory**, UFCG, Brazil. Software Engineer in the project Pulsar OpenStack in association to HP R&D (Porto Alegre RS). The project consists in collaborating with OpenStack. Using Python, SQLAlchemy, Bash Script.
- Jun 2013 Aug 2013: **Mitacs Globalink Research Intern, University of Calgary**, Calgary, AB, Canada. Developed different caching strategies in order to improve the performance of a Relationship-Based Access Control (ReBAC) API. Using Java, Maven, Bash Script.
- Jul 2012 Jan 2013: **Software Developer Intern, E.life**, Homeoffice. Working on the development of Data Mining Systems and information retrieval. Using Java, JSF, EJB 3.0, Apache Tomcat 7.0, JBoss Seam, HTML, PHP, JSON.
- Apr 2011 Jun 2012: **Software Developer Intern, Software Practices Laboratory**, UFCG, Brazil. Information system that models the entire investigations workflow of Brazilian Federal Police Department (Brazil). Using Java, JBoss Seam, Hibernate, JSF, Oracle, RichFaces and TestNG.

# **Publications**

- Francisco Demontiê, Junio Cezar, Mariza A. S. Bigonha, Frederico Campos, Fernando Magno Quintão Pereira, Automatic Inference of Loop Complexity Through Polynomial Interpolation. Brazilian Symposium on Programming Languages (SBLP), pp. 1-15. 2015.
- Francisco Demontiê, Filipe de Lima Arcanjo, and Mariza A. S. Bigonha. *Um Algoritmo para Emparelhamento de Chamadas de Função*. Brazilian Symposium on Programming Languages (SBLP). 2014.

# **Projects**

- NetLex API (2016). A REST API for NetLex (Brazil). Using PHP, Laravel, JavaScript, Angular.
- Asymptus (2015). A tool to automatically infer function complexity. Using C++, Python, LLVM.

# **Awards**

- Brazilian Symposium on Programming Languages (Belo Horizonte 2015) 3<sup>rd</sup> best paper.
- Microsoft's Coding Competition (Belo Horizonte 2015) Second Place.
- Paraiba Olympiads in Informatics (Campina Grande 2010 and 2011) Silver Medal.

### **Technical Skills**

- Java (proficient), Python (proficient), C++ (previous experience);
- Hibernate, Oracle, PL/SQL, PostgreSQL, MySQL;
- Web development using JavaScript and JavaEE 5: |Boss Seam, |SF, E|B 3.0;
- Other technologies: **LLVM**, Android, XML, HTML, CSS, SVN, Mercurial, Git.

# Languages

Portuguese – Native Language.

English – Advanced level on reading, understanding, writing, and speaking. TOEIC score: 860 – in October 17th, 2013