CURRICULUM VITÆ

João Vicente Ferreira Lima

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1 Education

(2010–2014) Ph.D., Computer Science, *cotutelle* agreement between:

- Federal University of Rio Grande do Sul (UFRGS), Brazil.
- Grenoble University, Grenoble, France.

(2007–2009) M.S, Computer Science, Federal University of Rio Grande do Sul (UFRGS) , Brazil.

(2003–2007) B.S, Computer Science, Federal University of Santa Maria (UFSM), Brazil.

2 Areas of Interest

High performance computing, accelerators, parallel programming, scheduling, energy efficiency, operating systems, cluster computing.

3 Experience

3.1 Teaching

- (07/2014 – current) Associate Professor at the Federal University of Santa Maria (UFSM), Santa Maria, RS, Brazil.

3.2 Research

- (3/2015 – current) Advisor at the Graduate Program in Computer Science at UFSM (master course).
- (03/2012 – 02/2013) Research at Laboratoire d'Informatique de Grenoble, Grenoble University, France, supported by CAPES/Brazil scholarship.
- (03/2010 – 02/2011) Research at Instituto de Informática, UFRGS, Brazil, supported by CNPq/Brazil scholarship.
- (09/2010 – 02/2011) Research at Laboratoire d'Informatique de Grenoble, Grenoble University, France, supported by Erasmus Mundus EBWII scholarship.
- (04/2009 – 02/2010) Research at Instituto de Informática, UFRGS, Brazil, supported by CNPq/Brazil scholarship in project *Massive Atmosphere*.
- (03/2007 – 03/2009) Research at Instituto de Informática, UFRGS, Brazil, supported by CAPES/Brazil scholarship, working on granularity of MPI-2 dynamic programs with processes and threads at runtime.

3.3 System Administrator

- (08/2005 – 02/2007) System administrator at Núcleo de Ciência da Computação (NCC), UFSM, suported by PRAE/UFSM and CPD/UFSM.

3.4 Employment

- (09/2003–07/2005) CPD/UFSM SIE application and report development in Delphi.

4 Awards

- First Place at the 6th Marathon of Parallel Programming - SBAC-PAD 2011 (SBC), Brazil.
- First Place at the 2nd GPU Programming Contest - SBAC-PAD 2011 (SBC), Brazil.
- Erasmus Mundus Euro Brazilian Windows II (EBWII) scholarship for 6 months (09/2010–02/2011), European Commission.

5 Teaching

I teach mainly programming lectures at the undergraduate course of Computer Science at UFSM since 2014.

- ELC1067 - Laboratório de Programação II, 1st semester 2016, 4 hours peer week.
- ELC106 - Lógica e Programação, 1st semester 2016, 4 hours peer week.
- ELC1066 - Estruturas de Dados "A", 2nd semester 2015, 4 hours peer week.
- ELC106 - Lógica e Programação, 2nd semester 2015, 4 hours peer week.
- ELC1068 - Pesquisa e Ordenação de Dados "A", 1st semester 2015, 4 hours peer week.
- ELC1067 - Laboratório de Programação II, 1st semester 2015, 4 hours peer week.
- ELC1067 - Laboratório de Programação II, 2nd semester 2014, 4 hours peer week.
- ELC137 - Sistemas de Informação Distribuídos, 2nd semester 2014, 4 hours peer week.

6 Supervision

6.1 Master students

- Daniel Di Domenico (2015–): High level parallel programming models for accelerators.
- Bruno Mokan Muenchen (2016–): Undefined title.
- Gabriel Freytag (2016–): Undefined title.

7 Software

1. **GitHub** Web site: `https://github.com/joao-lima`.

2. **XKaapi** I have been involved in the development of the XKaapi runtime system since 2010. Web site: `http://kaapi.gforge.inria.fr`.

8 Publications

Google scholar link: `https://scholar.google.com.br/citations?user=jb6bKmoAAAAJ`

8.1 Internacional peer-reviewed journal

- João V. F. Lima, Thierry Gautier, Vincent Danjean, Bruno Raffin, and Nicolas Maillard. "Design and Analysis of Scheduling Strategies for Multi-CPU and Multi-GPU Architectures". *Parallel Computing*, p. 37-52, 2015.
- João V. F. Lima, Nicolas Maillard. "Online mapping of MPI-2 dynamic tasks to processes and threads". *International Journal of High Performance Systems Architecture (IJHPSA)*, v. 2, pp. 81-89, 2009.

8.2 Internacional peer-reviewed conference proceedings

- Raphaël Bleuse, Thierry Gautier, João V. F. Lima, Gregory Mounie, and Denis Trystram. "Scheduling data flow program in XKaapi: A new affinity-based algorithm for heterogeneous architectures". *Proc. of the 20th Euro-Par*, 2014, Porto, Portugal.
- João V. F. Lima, François Broquedis, Thierry Gautier, and Bruno Raffin. "Preliminary Experiments with XKaapi on Intel Xeon Phi Coprocessor". *25th International Symposium on Computer Architecture and High Performance Computing (SBAC-PAD)*, Porto de Galinhas, Brazil, 2013.
- Thierry Gautier, João V. F. Lima, Nicolas Maillard, and Bruno Raffin. "XKaapi: A Runtime System for Data-Flow Task Programming on Heterogeneous Architectures". *2013 IEEE 27th International Symposium on Parallel Distributed Processing (IPDPS)*, p. 1299–1308, 2013.
- Thierry Gautier, João V. F. Lima, Nicolas Maillard, and Bruno Raffin. "Locality-Aware Work Stealing on Multi-CPU and Multi-GPU Architectures". *6th Workshop on Programmability Issues for Heterogeneous Multicores (MULTIPROG)*, p. 51–62, Berlin, Germany, 2013.
- João V. F. Lima, Thierry Gautier, Nicolas Maillard, and Vincent Danjean. "Exploiting Concurrent GPU Operations for Efficient Work Stealing on Multi-GPUs". *24th International Symposium on Computer Architecture and High Performance Computing (SBAC-PAD)*, p. 75–82, New York, NY, USA, 2012.
- Marco A. Z. Alves, Márcia C. Cera, João V. F. Lima, Nicolas Maillard, and Philippe O. A. Navaux. "Enhancing Energy Efficiency using Efficient Parallel Programming Techniques". *3o Conferencia Latino Americana de Computación de Alto Rendimiento (CLCAR 2010)*, p. 117–124, Gramado, Brazil, 2012.

8.3 Other conference proceedings

- Márcia C. Cera, João V. F. Lima, Nicolas Maillard, and Philippe O. A. Navaux. "Challenges and Issues of Supporting Task Parallelism in MPI". *17th European MPI Users' Group Meeting (EuroMPI 2010)*, p. 302–305, Stuttgart, Germany, 2010.