

# JEAN LUCA BEZ

#### • DETAILS •

Porto Alegre Brazil +55 54 9 9914 8181 jean.bez@inf.ufrgs.br

> Nationality Brazilian

# • TECHNICAL SKILLS •

**Data Storage** 

Data Analysis

Parallel Programming

MPI, MPI-IO, OpenMP

R

PHP, CakePHP

C, C++

Python

HTML & CSS

Git

SQL

**Distributed Systems** 

Parallel File Systems

## • LANGUAGES •

Portuguese

English

French

## • LINKS •

<u>LinkedIn</u>

ResearchGate

Google Scholar

**ORCID** 

#### PROFILE

Ph.D. candidate in Computer Science at the Federal University of Rio Grande do Sul (UFRGS). Master in Computer Science by the Federal University of Rio Grande do Sul (UFRGS). Bachelor of Science in Computer Science from the Universidade Regional do Alto Uruguai e das Missões (URI) Erechim. Passionate about High-Performance I/O, Parallel I/O, and Competitive Programming.

#### EMPLOYMENT HISTORY

Ph.D. Student - Researcher at Federal University of Rio Grande do Sul, Porto Alegre, Brazil

March 2017 — Present

Student grant by the National Council for Scientific and Technological Development (CNPq). Member of the Parallel and Distributed Processing Group (GPPD).

Master Student - Researcher at Federal University of Rio Grande do Sul, Porto Alegre, Brazil

March 2015 — March 2017

Student grant by the National Council for Scientific and Technological Development (CNPq) and the Coordination for the Improvement of Higher Education (CAPES). Member of the Parallel and Distributed Processing Group (GPPD).

Undergraduate Student - Researcher at Universidade Regional Integrada do Alto Uruguai e das Missões, Erechim, Brazil

August 2011 — February 2015

URI Online Judge (urionlinejudge.com.br)

Developer at AstrusWeb, Erechim

July 2010 — October 2021

#### EDUCATION

Doctorate in Computer Science, Federal University of Rio Grande do Sul (UFRGS), Porto Alegre, Brazil

February 2017 — Present

Advised by Prof. Dr. Philippe O. A. Navaux (UFRGS)

Co-Advised by Prof. Dr. Toni Cortes (Barcelona Supercomputing Center / Universitat Politècnica de Catalunya)

Master in Computer Science, Federal University of Rio Grande do Sul, Porto Alegre, Brazil

February 2016 — January 2017

"Evaluating I/O scheduling techniques at the forwarding layer and coordinating data server accesses" — Advised by Dr. Philippe O. A. Navaux

Bachelor, Universidade Regional Integrada do Alto Uruguai e das Missões, Erechim February 2010 — February 2015

## **INTERNSHIPS**

Visiting Researcher / Doctoral Stay at Barcelona Supercomputing Center, Barcelona, Spain

September 2019 — February 2020

Visiting Researcher at INRIA Centre de Recherche Grenoble Rhone-Alpes, Grenoble, France

February 2017 — February 2017

In the context of LICIA (International Laboratory in High Performance and Ubiquitous Computing) between UFRGS and INRIA. Visiting researcher at the Datamove Research Group.

### ★ AWARDS

1st Place - Contest of Thesis and Dissertations in Computer Architecture and High-Performance Computing (WSCAD — CTD), São Paulo, Brazil

October 2017

Received at the Simpósio de Sistemas Computacionais de Alto Desempenho (WSCAD), promoted by the Brazilian Computer Society (SBC).

**URI Best Student Award, Erechim** 

January 2015

Brazilian Computer Society (SBC) Highlight Student Award, Erechim January 2017

URI University Extension - Highlight Student Award, Erechim, Brazil 2013

URI University Extension - Highlight Student Award, Erechim, Brazil

#### ★ PROJECTS

**High Performance Computing for Energy (HPC4E)** 

2016 - 2018

I have collaborated on the HPC4E project, which aimed to apply new exascale HPC techniques to energy industry simulations, customizing them, and going beyond the state-of-the-art for different energy source simulations. The HPC4E consortium encompassed 13 partners, seven from Europe, and six from Brazil.

URI Online Judge, urionlinejudge.com.br

2012 — Present

An educational project created in Brazil by Neilor Tonin and Jean Luca Bez to help students to learn and practice algorithms and programming languages. It has more than 450,00 users. The platform has received more than 20 million solutions. It has also received a Brazilian National Award (Prêmio Santander Universidades) for its impact and importance. The project was presented at the ACM-ICPC World Finals in St. Petersburg, Russia, and in Phuket, Thailand.

# ★ SELECTED PUBLICATIONS

Adaptive Request Scheduling for the I/O Forwarding Layer Using Reinforcement Learning

2020

Jean LucaBez, Francieli Zanon Boitob, Ramon Nou, Alberto Miranda, Toni Cortes, Philippe O. A. Navaux

Future Generation Computer Systems, v. 112, p. 1156-1169

https://doi.org/10.1016/j.future.2020.05.005

# I/O Performance of the Santos Dumont Supercomputer

2019

Jean Luca Bez, André Ramos Carneiro, Pablo José Pavan, Valéria Soldera Girelli, Francieli Zanon Boito, Bruno Alves Fagundes, Carla Osthoff, Pedro Leite da Silva Dias, Jean-François Méhaut, Philippe O. A. Navaux

International Journal of High Performance Computing Applications, v. 34, p. 227-245

https://doi.org/10.1177/1094342019868526

# A Checkpoint of Research on Parallel I/O for High-Performance Computing 2018

Francieli Zanon Boito, Eduardo Camilo Inacio, Jean Luca Bez, Philippe O. A. Navaux, Mario A. R. Dantas, Yves Denneulin

ACM Computing Surveys, v. 51, p. 1-35, 2018

https://doi.org/10.1145/3152891

# TWINS: Server Access Coordination in the I/O Forwarding Layer

2017

Jean Luca Bez, Francieli Zanon Boito, Lucas Mello Schnorr, Jean-François Méhaut, Philippe O. A. Navaux,

25th Euromicro International Conference on Parallel, Distributed and Network-based Processing, pp. 116-123

https://doi.org/10.1109/PDP.2017.61

#### ★ VOLUNTEER EXPERIENCE

# Student Volunteer, Denver, USA

November 2019

ACM/IEEE SC'19 Supercomputing Conference

#### Lead Student Volunteer

November 2020

ACM/IEEE SC'20 Supercomputing Conference

# ICPC Deputy | Student Volunteer, Phuket, Thailand

May 2016

ICPC - International Collegiate Programming Contest

## SC21 Online Virtual Logistics Student Volunteers Liaison

February 2021

ACM/IEEE SC'21 Supercomputing Conference