# Miguel Felipe SILVA VASCONCELOS, Ph.D. Candidate

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#### **Education**

2020 - 2023 (expected)

Ph.D., Univ. Grenoble Alpes (France) and Univ. of São Paulo (Brazil)

2014 - 2017

Bachelor's Degree in Information Systems, Univ. of São Paulo (Brazil)

### Research projects

2020 - present

Ph.D. Thesis. Univ. Grenoble Alpes and Univ. of São Paulo.

This research project explores approaches to reduce the environmental impact of cloud computing platforms, focusing on the scheduling of the workloads that the clouds receive and the computing of the optimal renewable infrastructures (as solar panels and batteries) for the data centers that host these platforms, since it is not trivial finding their ideal dimensions, given that they also present a significant carbon footprint.

08/2017 - 12/2017

**Undergraduate Thesis.** Univ. of São Paulo

This work aimed to simplify the use of Volunteer Computing and proposed the use of software compiled for *WebAssembly* — a new assembly-like language that can be executed by modern browsers — and a Web application to support the distribution and execution of tasks, as well the validation and retrieval of results.

#### **Selected Publications**

- M. Vasconcelos, D. Cordeiro, G. Da Costa, F. Dufossé, J.-M. Nicod, and V. Rhen-Sonigo, "Optimal sizing of a globally distributed low carbon cloud federation," in 2023 23rd IEEE International Symposium on Cluster, Cloud and Internet Computing (CCGrid), 2023.
- M. Vasconcelos, D. Cordeiro, and F. Dufossé, "Indirect network impact on the energy consumption in multi-clouds for follow-the-renewables approaches," in *Proceedings of the 11th International Conference on Smart Cities and Green ICT Systems SMARTGREENS*,, INSTICC, SciTePress, 2022, pp. 44–55, ISBN: 978-989-758-572-2. ODI: 10.5220/0011047000003203.

#### Skills

Languages

Strong reading, writing and speaking competencies for English, and Portuguese. French level B1.

Coding

Python, C++, R, Java, Ruby on Rails, LaTeX, org

# Professional Experience

2022

**Teaching assistant**, University of São Paulo

Teaching assistant for the courses of Software Engineering and Development of Distributed Systems. Main activities were helping the students with their doubts, and helping develop and correct the courses main project.

## **Professional Experience (continued)**

2017 - 2020

Software Engineer, MC1 Tecnologia LTDA.

Development and support for *Sales Force Automation* applications in *Android* and *Web* platforms, for clients such as PepsiCo, Santander, AmBev, and others.

2015 - 2017

Scholarship Student, Programa de Educação Tutorial - PET-SI EACH USP

Develop and implement actions that promote, alongside with Information Systems graduation, the consolidation of the culture of system development (professional formation) under the inseparability of the prerogatives of research, education and extension. Main activities include organizing events such as the Freshmen's Programming Championship of Information Systems (BXCOMP).

### Other Experience

2015 - 2017

**COMPETEC**, University of São Paulo

In this project, coding dojos were applied to technical school students (informatic), with the objectives of promoting the learning and development of practices and skills related to solving programming challenges and the approach of technical school students to the university environment.

**PET Visita**, University of São Paulo

The proposal of this initiative is to take members of the PET-SI group, as undergraduate students of the Information Systems course, to the state or federal technical schools located in the city of São Paulo, to disseminate informations about the University of São Paulo (USP), the School of Arts, Sciences and Humanities, the Information Systems course and the policies of social inclusion promoted by USP. The main objective is to present to the young students (and future university students) details about the course and the institution itself, giving tangible perspectives regarding the access to the public university and elucidating doubts that may arise.

#### References

Available on Request