

Anderson Andrei da Silva,

Ph.D in Computer Science



Github and Gitlab: andersonandrei
Linkedin: Anderson Andrei da Silva
Email: silva.andersonandrei@gmail.com
Main page: <https://andersonandrei.github.io/>
Mobile Phone: (+33) 0766000724

I am a Postdoctoral Research Engineer with a Ph.D in Computer Science from the University of Grenoble-Alpes, in France. My thesis was done in collaboration with Ryax Technologies, and its subject was upon Serverless Runtime for Hybrid Edge-Cloud Infrastructures. I have a MSc in Computer Science from University of Grenoble-Alpes, which was focused on the Scheduling of Jobs in Edge-Cloud Platforms. My undergraduate degree was done at the University of São Paulo, in Brazil. I have been working in the Industry focused on the following research topics: **Serverless, Cloud and Edge Computing, Scheduling Policies, High Performance Computing, Data Science, Computer Networks, Parallel and Distributed Systems.**

PROFESSIONAL EXPERIENCES

POSTDOCTORAL RESEARCH ENGINEER - [HEWLETT PACKARD LABS, MILPITAS - UNITED STATES](#)

LABS - System Architecture Lab (SAL)

Period: January/ 2024 - December/ 2024

RESEARCHER AND SOFTWARE ENGINEERING - [RYAX TECHNOLOGIES, LYON - FRANCE](#)

Period: January/2021 - December/2023.

TEACHER ASSISTANT,

at [UNIVERSITY GRENoble ALPES, GRENoble - FRANCE](#) in French and English,

- Parallel and Distributed Systems, Master Degree, 2022
- Technical Writing and Speaking, Master Degree, 2022
- Introduction to Computer Science, 2022
- Database and Applications, 2022
- Design and Operation of Databases, 2021
- Computer Science and Programming, 2021

at [UNIVERSITY OF SÃO PAULO, SÃO PAULO, BRAZIL](#), in Portuguese,

- Concurrent and Parallel Programming, 2020
- Introduction to Computer Science to Mathematical Sciences, 2019
- Programming Topics, 2018

RESEARCHER, INTERN - [LABORATOIRE D'INFORMATIQUE DE GRENOBLE, GRENOBLE - FRANCE](#)

Advisor: Prof. Denis Trystram.

Period: February/ 2019 - Jun/ 2019

NETWORK ADMINISTRATOR - [UNIVERSITY OF SÃO PAULO, SÃO PAULO - BRAZIL](#)

Period: April/ 2017 - July/ 2018

COMPUTER MAINTENANCE INTERN - [UNIVERSITY OF SÃO PAULO, SÃO PAULO - BRAZIL](#)

Period: April/ 2015 - April/ 2017

EDUCATION

PHD IN COMPUTER SCIENCE, [UNIVERSITY GRENOBLE ALPES, GRENOBLE - FRANCE](#)
[RYAX TECHNOLOGIES, LYON - FRANCE](#)

Advisors: Prof. Denis Trystram, Prof. Gregory Mounier,
Dr. Yiannis Georgiou, and Dr. Michael Mercier.

Period: January/ 2021 - December/ 2023.

MASTER DEGREE IN COMPUTER SCIENCE, [UNIVERSITY GRENOBLE ALPES, GRENOBLE - FRANCE](#)

Advisor: Prof. Denis Trystram

Program: Master of Science in Informatics, MOSIG - M2

Specialization: Parallel, Distributed and Embedded Systems

Period: September/ 2018 - June/ 2019

UNDERGRADUATE DEGREE IN COMPUTER SCIENCE, [UNIV. OF SÃO PAULO, SÃO PAULO - BRAZIL](#)

Advisor: Professor Alfredo Goldman

Program: Bachelor in Computer Science

Period: January, 2017 - July, 2020

LANGUAGES

PORTUGUESE: Native; **ENGLISH:** Fluent; **FRENCH:** Fluent.

SKILLS

GENERAL: Design of experiments, Statistical Analysis, Communication, Speech/ Presentations, Scientific Writing, Open-source Software Development.

SOFTWARE ENGINEERING: Kubernetes, Knative, OpenWhisk, Pegasus, R, C, Python, OMP, Julia, Bash, Django, SQL, Neo4j, Mong.DB.

TOOLS AND INFRASTRUCTURE: GNU/Linux, Git, Automated Testing, LaTeX, Emacs.

PUBLICATIONS

Anderson Andrei Da Silva, Yiannis Georgiou, Michael Mercier, Gregory Mounié, and Denis Trystram. “FOA-Energy: A Multi-objective Energy-Aware Scheduling Policy for Serverless-based Edge-Cloud Continuum”. The 40th ACM/SIGAPP Symposium On Applied Computing (ACM SAC 2025) [Acceptance notification]

Anderson Andrei Da Silva, Rolando Pablo Hong Enriquez , Gourav Rattihalli, Vijay Thurimella, Rafael Ferreira da Silva, Dejan Milojicic. “Enabling HPC Scientific Workflows for Serverless”. 6th workshop on Containers and new orchestration paradigms for isolated environments in HPC (CANOPIE-HPC) at Supercomputing 2024.

Vijay Thurimella, Philipp Raith, Rolando Pablo Hong Enriquez, **Anderson Andrei Da Silva**, Gourav Rattihalli, Ada Gavrilovska, Dejan Milojicic. “Serverless Computing for Dynamic HPC Workflows”. 19th Workshop on Workflows in Support of Large-Scale Science at Supercomputing 2024.

R. Ferreira da Silva, ..., **Anderson Andrei Da Silva**, et.al “Workflows Community Summit 2024: Future Trends and Challenges in Scientific Workflows”. Zenodo, Oct. 18, 2024. doi: 10.5281/zenodo.13844759.

L. Angelelli, **A. A. da Silva**, Y. Georgiou, M. Mercier, G. Mounié and D. Trystram, "Towards a Multi-objective Scheduling Policy for Serverless-based Edge-Cloud Continuum," 2023 IEEE/ACM 23rd International Symposium on Cluster, Cloud and Internet Computing (CCGrid), Bangalore, India, 2023, pp. 485-497, doi: 10.1109/CCGrid57682.2023.00052.

Danilo Carastan-Santos, **Anderson Andrei da Silva**, Denis Trystram, Alfredo Goldman, Angan Mitra, Yanik Ngoko, Clément Mommessin. "Short-Term Ambient Temperature Forecasting for Smart Heaters," 2021 IEEE Symposium on Computers and Communications (ISCC), Athens, Greece, 2021, pp. 1-6, doi: 10.1109/ISCC53001.2021.9631550.

Anderson Andrei Da Silva; Clément Mommessin; Pierre Neyron; Denis Trystram; Adwait Bauskar; Adrien Lebre; Alexandre Van Kempen; Yanik Ngoko; Yoann Ricordel. "Evaluating Computation and Data Placements in Edge Infrastructures through a Common Simulator," 2020 IEEE 32nd International Symposium on Computer Architecture and High Performance Computing (SBAC-PAD), Porto, Portugal, 2020, pp. 67-74, doi: 10.1109/SBAC-PAD49847.2020.00020.

Andrei, Anderson; Abrahão, Patrick; Immich, Roger; Goldman, Alfredo. Transmissão De Vídeo Em Tempo Real Em Redes Ad Hoc. In: Workshop De Trabalhos De Iniciação Científica E De Graduação - Simpósio Brasileiro De Redes De Computadores E Sistemas Distribuídos (Sbrc), 1. , 2018, Campos Do Jordão.

EUROPEAN PROJECTS

PHYSICS (Optimized Hybrid Space-Time Service Continuum in FaaS)

Partner: Ryax Technologies

Period: 2021 - 2024

TALKS

Anderson **Andrei Da Silva**, Denis Trystram, Gregory Mounier, Yiannis Georgiou, and Michael Mercier. “Towards Container layer aware Scheduling Policies” - DevConf.CZ, 2023, Brno - Czech Republic. Talk: https://www.youtube.com/watch?v=Rmj5b_w02Lg .

Anderson **Andrei Da Silva**, Denis Trystram, Gregory Mounier, Yiannis Georgiou, and Michael Mercier. Towards Container layer aware Scheduling Policies. “Towards an Energy-Aware Multi-objective Scheduling Policy for Server-based Edge-Cloud Continuum”. CONFÉRENCE FRANCOPHONE D'INFORMATIQUE EN PARALLÉLISME, ARCHITECTURE ET SYSTÈME (COMPAS), 2023, Annecy - France, 2023.

Reference: <https://2023.compas-conference.fr>

Anderson **Andrei Da Silva**, Denis Trystram, Gregory Mounier, Yiannis Georgiou, and Michael Mercier. “Scheduling of Functions on Serverless Platforms”. 6th GRD RSD/ASF WINTER SCHOOL ON DISTRIBUTED SYSTEMS & NETWORK, Rhône-Alpes - France, 2022.

COMPLEMENTARY ACTIVITIES

40TH ACM/SIGAPP SYMPOSIUM ON APPLIED COMPUTING 2025 (ACM SAC 2025), Sicily - Italy

PROGRAMME COMMITTEE

Reference: <https://sites.google.com/ime.usp.br/acmsac2025cctrack>

SUPER COMPUTING 2024 (SC24), Atlanta - United States

SPEAKER (WORKSHOP PAPER), REPRODUCIBLE ARTIFACTS COMMITTEE

Reference: <https://sc24.supercomputing.org/planning-committee/>

FROM RESEARCH TO REALITY PODCAST

ORGANIZATION/ PRODUCTION TEAM, 2024

Reference: <https://www.youtube.com/@HPE/podcasts>

NEW CHALLENGES IN SCHEDULING THEORY, Aussois - France

ORGANIZING COMMITTEE, 2022

Reference: <https://aussois2022.imag.fr/>

SEMANA DA COMPUTAÇÃO - COMPUTER SCIENCE WORKSHOP, São Paulo - Brazil

ORGANIZING COMMITTEE, 2019-2020

Reference: <https://bcc.ime.usp.br/semana-da-computacao/>

SÃO PAULO SCHOOL OF ADVANCED SCIENCE ON SMART CITIES, São Paulo - Brazil

ORGANIZING COMMITTEE, 2017

Reference: <https://intercity.org/advanced-school/>

EXCHANGE PROGRAM, Chicago - United States

ENGLISH LANGUAGE COURSE, 2013

Scholarship: Etec de Francisco Morato and Centro Paula Souza.