HEITOR DE BITTENCOURT

heitorpbittencourt@gmail.com https://linkedin.com/in/heitorpb
https://github.com/heitorpb https://heitorpb.github.com

SKILLS

Python, Bash, Shell, C++, Fortran, Git, Docker, DevOps, SSH, Linux, Ubuntu, CentOS, Systemd, XFS, Continuous Integration, Continuous Delivery, Observability, Distributed Systems, High Performance Computing (HPC), Open-source, Technical writing, Documentation Writing, Teaching, Troubleshooting, Agile, Scrum.

EXPERIENCE

Lavanet Jan 2023 - Present
Senior DevOps Engineer *Remote*

- Deployed Caddy as reverse proxy for gRPC connections, handling up to 5k requests/sec.
- Wrote extensive internal documentation about processes, systems and troubleshooting sessions.
- Misc: Python, Bash, Ansible, Git, GitHub Actions, Caddy, Nginx, Gatus, Open-source.

Omnivector Solutions Feb 2021 - Oct 2022
Principal Infrastructure Engineer *Remote*

- Led the Infrastructure team.
- Responsible for the product's core architecture, scalability and functionality.
- Wrote extensive documentation about the products, for end-users and coworkers.
- Misc: Python, Juju, Bash, Git, GitHub Actions, Open-source, Infiniband, Slurm, Linux, CentOS, Ubuntu, XFS, Systemd, Fluentbit, Prometheus, Grafana, etcd, LXD, REST APIs, Jira, Scrum, inverviewing candidates.

Itera Aug 2019 - Dec 2020
Python Engineer *São Carlos, Brazil*

- Responsible for the infrastructure.
- Containerized the backend, frontend and A.I. pipelines, scaling the processing power as needed.
- Developed backend and REST APIs in Python.
- Misc: Python, FastAPI, Bash, Docker, Git, RabbitMQ, AWS (EC2, S3), Scrum.

CERN Aug 2018 - Dec 2018
Researcher *Geneva, Switzerland*

- Data mining of large-scale Physics' datasets.
- Categorisation of datasets into hierarchical topics.
- General portal improvements: documentation, glossary, markdown engine, user interface.
- Misc: Python, Flask, Bash, Docker, Git, HPC, OpenData, OpenSource, ROOT.

University of São Paulo Jan 2013 - Feb 2015
Undergraduate Researcher *São Carlos, Brazil*

- Simulated the evolution of spin systems in a magnetic field stimulated by RF pulses.
- Developed a GUI using Qt under Python for visualization of magnetic profiles.
- Misc: Python, C++, Cuda, QT, Boost, Nuclear Magnetic Resonance.

EDUCATION

University of São Paulo Feb 2017 - Mar 2021
Master of Science in Physics *São Carlos, Brazil*

· Thesis: *Search strategies and phase transition in the Random Boolean satisfiability problem.*
· Link: https://doi.org/10.11606/D.76.2021.tde-02092021-162034

Helsinki University Aug 2015 - Jul 2016
Bachelor of Science in Physics *Helsinki, Finland*

· Exchange student.

University of São Paulo Jan 2013 - Jan 2017
Bachelor of Science in Physics *São Carlos, Brazil*

PATENTS AND PUBLICATIONS

PyMR - A Framework for Programming Magnetic Resonance System 2019

· Patent number BR512019001829-0.

Open data provenance and reproducibility: a case study from publishing CMS open data Nov 2019

· Online at https://doi.org/10.1051/epjconf/202024508014

Basic Python Course textbook - in Portuguese 2016

· Online at https://curso.grupysanca.com.br/