VICTOR SANTOS

Data Scientist | Software Engineer | Physicist

Fortaleza, Ceará, Brazil
victor_santos@fisica.ufc.br
https://www.linkedin.com/in/vctsantos
https://github.com/padawanphysicist

3+ years of experience with data driven solutions to increase efficiency, accuracy and utility of data processing. Experienced with data pipelines, databases and analytic dashboards to deliver insights and implement action-oriented solutions. I am looking for opportunities that allow me to explore the intersection of data science and the challenges of business decisions, expanding my technical knowledge and positively impacting organizations.

EDUCATION

Ph.D. in Physics   *Aug 2010 — Aug 2014*
Universidade Federal do Ceará   Fortaleza, Ceará, Brazil
Visiting scholar at Pennsylvania State University

B.Sc. in Physics   *Feb 2005 — Dec 2009*
Universidade Federal do Ceará   Fortaleza, Ceará, Brazil

EXPERIENCE

Data Scientist & Data Engineer   *Jul 2021 — Sep 2023*
Instituto de Planejamento de Fortaleza (IPLANFOR)   Fortaleza, Ceará, Brazil

- Lead a team of 2 data scientists in implementing the pipelines for collecting and consolidating data from different sources within the City Hall into an integrated database

- Design an analytics platform to obtain insights about the city, allowing the policymakers to calibrate and evaluate public policies

Skills: R, Python, Data Visualization, Databases, Storytelling

Data Scientist   *Aug 2018 — Nov 2022*
Fundação Cearense de Apoio ao Desenvolvimento Científico e Tecnológico (FUNCAP)   Fortaleza, Ceará, Brazil

- Worked with finance and research boards to create a report on the analysis and evaluation of scientific research developed in the state of Ceará, establishing an overview of the main areas funded by the government and a profile of the researchers and publications within the national and international scenario, through collecting and analyzing of data from national and international publishing databases, such as the Lattes platform, Scielo, Google Scholar and Montenegro platform.

Skills: R, Ruby, Databases, Data Visualization, Storytelling

Lecturer   *Feb 2017 — Feb 2019*
Universidade Federal do Ceará   Fortaleza, Ceará, Brazil

- Teach basic Physics courses for Engineering, Physics and Geology

- Meet with and advise students outside class time for additional instruction as appropriate

Skills: Python, Storytelling, Mentoring

Data Analyst   *Jan 2017 — Jul 2017*
Universidade de Fortaleza   Fortaleza, Ceará, Brazil

- Worked with the team to develop a report for the project **E-Car Sharing**, providing an understanding of the impact of electric vehicles in urban mobility.

Skills: Research, Storytelling, Data Visualization

Postdoctoral Researcher   *Sep 2014 — Aug 2017*
Universidade Federal do Ceará   Fortaleza, Ceará, Brazil

- Developed research on quantum aspects of gravitational theories, obtaining bounds for observational cosmological parameters which would indicate deviations from the classical theory.

- Mentored 1 Ph.D. and 2 M.Sc.graduate students

Skills: Python, Research, Storytelling, Mentoring

SKILLS

General Skills:	Statistics, Data Cleaning, Data Analysis, Data Visualization, Research, Mentoring
Programming Languages:	Python, R, C, Scheme, HTML/CSS, JavaScript, PL/pgSQL
Database/Server:	PostgreSQL, BaseX
Cloud Computing:	Google Cloud Computing
Containerization:	Docker, Kubernetes, OpenShift
Other Tools:	Apache Superset, Apache Spark, Apache Airflow, Prefect, Git
Operating Systems:	Linux, Windows

LANGUAGES

- English   *C1*

- Portuguese   *Native*

PROJECTS

mittleffpy
Collaboration with Hansjörg Seybold

Python package for efficiently compute the Mittag-Leffler function, using an improved implementation of the algorithm presented in:

Hansjörg Seybold and Rudolf Hilfer. Numerical algorithm for calculating the generalized Mittag-Leffler function. *SIAM journal on numerical analysis* **47**:1, 69-88 (2009)

Skills: Python, C, Research, Unit Testing

Atlas of Human Capital

R Shiny Report and Dashboard to monitor data about education in Fortaleza.

Skills: R (Shiny), PostgreSQL, Databases, Public Policies

Mais Fortaleza

R Shiny Report and Dashboard to monitor, publish, and divulge information related to the implementation of the Brazilian Solid Waste Legislation (PNRS) in Fortaleza.

Skills: R (Shiny), PostgreSQL, Databases, Public Policies

Greybody factor and quasinormal modes of Regular Black Holes

Numerical investigation on the quasinormal frequencies of a class of regular black hole solutions.

Skills: Python, Research, Analytical Thinking