

ALEXANDRE HENRIQUE S. DIAS

I'm a Computer Engineer and Data Scientist. I enjoy spending my free time studying statistics, programming and reading Data Science-related articles. At work, I play my role mostly in building visualizations to clients and contributing to the company's R package.



INDUSTRY EXPERIENCE

Present
|
2019

Data Scientist

Looqbox

📍 São Paulo, SP

- Work primarily done in R, Python, and SQL to develop graphics visualizations.
- I'm a contributor of the Looqbox R Package used to build R objects and data structures for the Looqbox Application.



EDUCATION

Present
|
2020

MITx Micromaster Program in Statistics and Data Science

MITx on edX

- The program covers the fundamentals of data science, statistics, and machine learning.

2019
|
2018

B.S., Computer Engineering

Federal University of Rio Grande Do Norte - UFRN

📍 Natal, RN

- Member of the Modeling and Scientific Data Analysis team.

2017
|
2015

B.S., Sciences & Technology

Federal University of Rio Grande Do Norte

📍 Natal, RN

- Linear Algebra and Analytical Geometry assistant teacher.
- Calculus II assistant teacher.



RESEARCH EXPERIENCE

2019
|
2018

Undergraduate Researcher

Digital Metropolis Institute

📍 UFRN

- Developed a traffic monitoring system using image recognition.

2017
|
2016

Undergraduate Researcher

Department of Informatics and Applied Mathematics

📍 UFRN

- Developed an interactive theorem prover based on Linear Logical using the Maude programming language.

CONTACT

✉ alexandre.hsd@gmail.com

in [linkedin.me](https://www.linkedin.me)

🐙 github.com/alexandrehsd

M medium.com/@alexandre.hsd

🐦 [alehsdias](https://twitter.com/alehsdias)

LANGUAGE SKILLS

📊 R (tidyverse, base R, package development)

🐍 Python (pandas, numpy, matplotlib, seaborn, statsmodels, scikit-Learn)

🗄 SQL (MySQL, Oracle)

🐙 git (and GitHub)

🔗 C (Parallel Programming with OpenMP, pthreads and MPI)

🔴 C++

Made w/ R *pagedown* package.

The source code is available at github.com/alexandrehsd/cv.

Last updated on 2020-09-01.



SELECTED DATA SCIENCE WRITING

2020

A mathematical derivation of the Law of Total Variance

The Startup, Medium

- O que é e como usar a lei da variância total.

2019

Clustering with K-means: simple yet powerful

Medium

- Explain what is Cluster Analysis, and how the K-means algorithm work providing its pros and cons.

2019

An introduction to Linear Regression

Medium

- Explain all assumptions behind Linear Regression models, how to measure their performance, and how to implement a model in Python.

I am most interested in readings about data science, statistics, and AI.



ACADEMIC PUBLICATIONS

2019

Performance Evaluation of an Edge OBD-II Device for Industry 4.0

Institute of Electrical and Electronics Engineers - IEEE

- Authored with Ivanovitch Silva, Paolo Ferrari, Diego Silva, Marianne Silva, and Gabriel Signoretti.

Paper published in the 2019 II Workshop on Metrology for Industry 4.0 and IoT (MetroInd4.0&IoT). Naples, Italy.



CERTIFICATES & COURSES

2019

|
2018

DataCamp completed tracks

DataCamp

- Data Scientist with Python.
- Data Analyst with Python.
- Data Manipulation with Python.
- Machine Learning with Python.
- Importing & Cleaning Data with Python.
- Python Programming.
- Python Programmer.



TALKS

Mar. 2019

Understand what is Data Science and how this field is going to color the 21st Century (translated)

Arduino Day 2019: A worldwide celebration of Arduino



UFRN

- Invited talk about what is data science and what it takes to become a data scientist.

Dec. 2018

Predicting Pulsar Stars: How Data Science helps us understand the universe (translated)

II seminar on Data Science Applications

📍 UFRN

- Talk about the importance of detecting Pulsar Stars, and how we can implement a simple neural network to beat XGBoost.