

# 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  
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2020

### Advanced Machine Learning Specialization

Coursera - National Research University Higher School of Economics

- This specialization gives an introduction to deep learning, reinforcement learning, natural language understanding, computer vision and Bayesian methods.

Present  
|  
2020

### MITx Micromaster Program in Statistics and Data Science

EdX - MITx

- 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.

## CONTACT

✉ [alexandre.hsd@gmail.com](mailto:alexandre.hsd@gmail.com)

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

🐙 [github.com/alexandrehsd](https://github.com/alexandrehsd)

M [medium.com/@alexandre.hsd](https://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](https://github.com/alexandrehsd/cv).

Last updated on 2020-10-03.

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.



## 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.