

# João Pedro da Silva Oliveira

## Data Scientist & Backend Developer

Back-End developer with solid experience in Node.js, MongoDB and agile methodologies, currently transitioning to the data area. I have advanced skills in data analysis and machine learning, with proven leadership and teamwork skills.

## PROFESSIONAL EXPERIENCE

### Ágora

March 2023 - Current

#### Mid-level Back-End Developer

- **Leadership of the back-end team:** agile task management (Scrum), ensuring good communication with the Front-End.
- **Owner of NoSQL databases (MongoDB):** responsible for creating and managing NoSQL databases (MongoDB).
- **Mongoose:** use of the ODM library to connect to the database, create schema and data modeling; query performance monitoring and backup management.
- **Data analysis:** to trace user retention analysis, profiling behavior and general user data; participation in meetings with the board to determine the next features to be launched.
- **Routes, controllers and endpoints:** development and maintenance in Node.js and Express.js.
- **MSC architecture deployment:** Leadership in refactoring the application to follow the Model-Service-Controller architecture.
- Creation of integration tests with Mocha, Chai and Sinon.
- Use of Docker to create and feed containers simulating the MongoDB database.
- API documentation using Swagger.
- Code deployment on AWS.
- Creation, organization of the GitHub repository and control of permissions

#### Junior Back-End Developer

Janeiro 2022 - Março 2023

- Application development from scratch.
- Creation and configuration of NoSQL MongoDB with schemas and models.
- Development of routes, controllers and endpoints using Node.js and Express.js, and carrying out tests with Postman.
- Creation and integration of middleware.
- Constant contact with the Front-End to ensure efficient integrations

### Laboratório de Dosimetria da Radiação

2021 - 2022

#### Researcher (Scientific Initiation)

- Development of materials radiologically equivalent to breast tissue.
- Preparation of reports based on data modeled in Python.

## ACADEMIC EDUCATION

### Universidade de São Paulo

2019 - 2023

#### Bachelor of Physics

- Took four Experimental Physics subjects, in which data collection, analysis and modeling were essential for generating results.
- Took courses focusing on Python, using programming to perform calculations and mathematical approximations of physical interest.
- Learned statistical methods for data analysis, such as statistical metrics, hypothesis testing, and statistical distributions.

## CONTACT INFORMATION

**Phone:** (11) 99149-7026

**Email:** jpdso15@gmail.com

**Location:** São Paulo - SP

## SKILL

Database management  
Data analysis and visualization  
Back-End Development  
Process automation  
APIs RESTful  
Agile Methodologies (Scrum)  
Middleware Integration  
Integration and unit tests  
Software design and architecture  
Agile team leadership

## CERTIFICATIONS

### University of Michigan

Applied Machine Learning in Python

Applied Plotting, Charting and Data Representation in Python

Introduction to Data Science in Python

Introduction to Structured Query Language (SQL)

### Udemy

Python Programming: From Basic to Advanced

Shell Script Programming: automating routines in Linux

Power BI C

Machine Learning and Data Science with Python

## KNOWLEDGE

**Database** ●●●●

NoSQL, MongoDB, PowerBI

**Languages** ●●●●

Python, JavaScript, C#, Shell, SQL

**Frameworks & Libraries** ●●●●

Node.js, Express.js, Mongoose, Mocha, Chai e Sinon

**English(Advanced)** ●●●●