# João Victor Torres Borges

Robotics Engineer, Computer Engineer

Salvador-BA, Brazil

+55 8299801 5259

https://github.com/BorgesJVT

borgesjvt@gmail.com

## Languages

Portuguese **English** 

### Skills

C++ Libs: Boost, Eigen, OSQP

🥏 Python ROS/ROS2 Gazebo

Git OpenCV

A Linux

Docker

Yocto Robotics

**Computer Vision** Control Systems

**Embbeded Systems** Machine Learning

# Open Source Contributions

ros2\_control

ros2\_control\_demos

I'm a Computer Engineer graduated from the Federal University of Alagoas, Brazil. I have acted as Robotics Engineer, for 2 years, professionaly, and have 5 years of academic experience, working with control, navigation, simulation, SLAM and multirobot coordination. I also have worked with computer vision and embbeded systems, developing prototypes of mobile robots and autonomous systems applications. My strong skills are C++ and ROS for development. Currently, I work at the Brazilian Robotics Institute, in SENAI CIMATEC, on projects related mainly to the Oil and Gas industry.

#### **Working Experience**

#### **Fulltime**

2019 -**Robotics Engineer** currently

SENAI CIMATEC

**RBiM** is a project of a robot to attend tasks of inspection and intervention in the field of Oil and Gas. Activities developed were the robot dynamic model in an underwater environment, controller design, teleoperation and control of devices. An interface for debugging and data visualization was also implemented.

TRIS project - Thermal Remote Identification System of Feverish People raises up, during COVID-19 pandemic, as a virus propagation control tool by assisting in the process of detecting feverish people. The essential modules are face detection and recognition, as well as, temperature estimation. Activities developed were the software architecture design, data acquisition and integration of modules into an optimized pipeline for real time application.

2019 – 2019

**Robotics Engineer** 

**Brisa Robotics** 

Activities developed were software development and integration, mainly stacks like mapping and localization, navigation and WEB dashboard, to launch a differential robot capable of navigate autonomously. Demo work: https://www.linkedin.com/feed/ update/urn:li:activity:6554061159870316544/

Interships

2017 - 2017

**Software Engineer** 

City Hall IT Department

Activities developed were software development and maintainance for the city hall WEB systems implemented in JAVA. Some of those tasks included database (PostgreSQL) gueries, frontend-controller funcionalities and bug fixes.

### **Education**

Study

2011 – 2017

**Bachelor in Computer Engineer** Federal University of Alagoas - UFAL

Thesis: A Case Study for Analysis and Evaluation ORB-SLAM Algo-

Demo work: https://www.youtube.com/watch?v=7BjPOosEKhU&t=

#### **Publications**

2020 TRIS: Thermal Remote Identification System of Feverish People

International Symposium on Innovation and Technology - SIINTEC PID Controller Synthesis for Network Controlled Second Order

2018 **Systems** 

Brazilian Conference on Automation - CBA