

# JOHNATHAN FERCHER DA ROSA

## Software Engineer

 [github.com/johnfercher/public](https://github.com/johnfercher/public)

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 [johnfercher](https://github.com/johnfercher)



## EXPERIENCE

### Software Engineer II

#### Uber


 2022/05 – 2023/04

 Remote

- I worked in Ambient Safety team developing features related to safety as: Guest Rides, Women Rider Preferred, Pin Verification, Share Trip and Safemode.

### Senior Analyst Developer

#### Mercado Libre

 2019/04 – 2022/04

 Remote

- I worked developing microservices in the shipping business unit of Mercado Libre. Our main focus was provide solutions to allow/help logistic processes to happen. The microservices which I used to work with had a high throughput and were critical to the shipping process.

### Junior Analyst Developer

#### Braspag (Cielo)


 2017/08 – 2019/01

 Rio de Janeiro

- I worked at Braspag developing complementary systems to antifraud, the mainly work was based on the development of REST APIs to facilitate integration with antifraud systems as Cyber-source and Red.

### Scientific Internship

#### National Laboratory of Scientific Computing (LNCC)

 2014/03 – 2015/02

 Petrópolis

- In the LNCC, I worked at Laboratory of Collaborative Environments and Applied Multimedia (ACiMA) with virtual reality.

### Trainee of Research and Development

#### Allen Informática

 2013/03 – 2014/01

 Petrópolis

- During my experience at Allen Informática as Trainee in the sector of Research and Development, I worked in the construction of web projects using the MVC pattern.

## EDUCATION

### M.Sc. in Robotics

#### Military Institute of Engineering

 2015/01 – 2017/01  Rio de Janeiro

**Dissertation title:** Construction of a Framework of Path Planning and Trajectory Control in Real Time of Multiple Robots

### B.Tech. in Information and Communications Technology

#### FAETERJ

 2012/01 – 2015/01  Petrópolis

**Monograph title:** Construction of a robot soccer team to the category IEEE Very Small Size Soccer

## LANGUAGES

Portuguese



English



Spanish



## SKILLS

Golang

Object-Oriented Programming

C++

Design Patterns

Microservices

Domain-Driven Design

Observability

Software Architecture

SOLID

C#

Automated Testing

Messaging

REST

Docker

MySQL

ElasticSearch

Datadog

Document Database

Key-Value Database

Kibana

NewRelic

Git/Github

Linux & MacOS

Jira

Slack

## HONORS & AWARDS



**Runner-up Robocup 2D Soccer Simulation League**

Latin American Robotics Competition



**4th Place - IEEE Very Small Size Soccer**

Latin American Robotics Competition

# PROJECTS

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## Maroto

**OpenSource (+1000 stars on Github)**

- Maroto is an opensource go lang library that allows the generation of PDFs in an easy way. The main focus of maroto is to be simple, with that in mind, the library has a grid system based on Bootstrap and there are some components that aid the development of complex documents.

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## Blog

**Medium**

- My personal blog where I write about many subjects, in general: programming, robotics, academic, games and hack.

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## Presentations

**Opened and Internal Events**

- Campus Party, The Developer's Conference, DevFest - SUL (Google Developers Group Event), MELI Tech Day (Mercado Libre Internal Event), TechTalk (Braspag Internal Event), CCOMP Talk (UNIFESO Event) and Various Academic Events.

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## TaleSlab

**OpenSource**

- TaleSlab is an opensource project that generates maps (slabs) to the game TaleSpire. Was done a clean room reverse engineering in the game protocol to understand how to serialize and deserialize the data correctly, and was developed a map generation engine.

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## VSS-SDK

**OpenSource**

- The VSS-SDK is an opensource project that aid to build robot soccer teams. The SDK focus on IEEE Very Small Size Soccer category present on Latin-American Robotics Competition.

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## SIRLab

**Laboratory**

- The SIRLab is a laboratory from FAETERJ-Petrópolis which realizes research in robotics. The laboratory has projects of Rescue Simulation, Smart Home, Robot Soccer (IEEE Very Small Size Soccer) and Soccer Simulation (RoboCup 2D Soccer Simulation).

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## Volunteer

**Staff**

- Google Developers Group, Petrópolis.
- Brazilian Robotics Olympiad

# PUBLICATIONS

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## Journal Articles

- Rosa, J., & Rosa, P. (2020). Multiple path planning of terrestrial robots in dynamic environments. *Military journal of science and technology*, 38, 27–36.

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## Conference Proceedings

- Rosa, J. F., & Ferreira Rosa, P. F. (2017). A general approach to the problem of path planning and trajectory control of multiple terrestrial robots in dynamic environments. In *2017 brazilian symposium on intelligent automation*, Porto Alegre, Brazil.
- Rosa, J. F., & Ferreira Rosa, P. F. (2016). Construction of a framework of path planning and trajectory control in real time of multiple robots. In *III workshop on msc dissertation and phd thesis in robotics*, Recife, Brazil.