



## Personal Data

28 years old, Brazilian

## Contact

+55 (37) 999971514

acristoffers@gmail.com  
https://acristoffers.me

## Languages

Portuguese (native)  
English (C1)  
German (C1)  
French (B2)

## Skills

System Analysis and Control,  
C/C++, Python, Kotlin,  
Assembly, MATLAB, Android  
Development, Frontend,  
Backend, Embedded,  
Automation, Robotics

## Summary

Mechatronic engineer studenting with experience in **system analysis and control** and **programming**. Loves to work in a cooperative environment towards solving complex problems. Has worked in two scientific initiations toward using an **advanced control technique** (Model Predictive Control). Loves to learn languages and to help others develop their projects.

## Experience

- |   |   |                                   |
|---|---|-----------------------------------|
| 2016–2016   | <b>Acal BFi</b><br><i>Intern</i>                                    | Dietzenbach, Hessen, Germany      |
| During this internship, I developed a platform to measure the power loss inside the kernel of the inductor used in a PFC circuit.   |   |                                   |
| 2010–2014   | <b>Corpo de Bombeiros Militar de Minas Gerais</b><br><i>Fireman</i> | Divinópolis, Minas Gerais, Brazil |
| As a firefighter I was entitled to work as a first-aider and diver, being the first response in all sorts of accidents, from fire in the wilds to car accidents and industrial and natural disasters. |   |                                   |

## Education

- |   |                                |  |
|---|--------------------------------|--|
| 2013–Today  | <b>Mechatronic Engineering</b> | Centro Federal de Educação Tecnológica de Minas Gerais |
| Since my first semester, I helped other students from graduation, master and Ph.D. with their projects, especially with programming. In my last year, I became the student representative in the Graduation Council         |                                |  |
| 2015–2016   | <b>Student Exchange</b>        | Frankfurt University of Applied Sciences, Germany      |
| I studied as an exchange student through the Brazilian government's program Ciências Sem Fronteiras (Science Without Borders).  |                                |  |
| 2015–2015   | <b>Student Exchange</b>        | Université Grenoble Alpes, France                      |
| I studied as an exchange student through the partnership between UGA and CEFET-MG. There I worked in the robotics laboratory helping the team who won the second place in the National Instruments MyRIO Paris competition. |                                |  |

## Extracurricular

- |   |  |            |
|---|--|------------|
| 2017 & 2018   | <b>Python mini-course</b>                              | Ministered |
| I ministered a Python mini-course at my university. The textbook (in Portuguese) is freely available at <a href="https://acristoffers.me/assets/Python3.pdf">https://acristoffers.me/assets/Python3.pdf</a> |  |            |
| 2017  | <b>Semana C&amp;T - Week of Science and Technology</b> | 1st Place  |
| My project got the first place in the 13rd workshop at my university.   |  |            |
| 2015  | <b>National Instruments MyRIO Competition, Paris</b>   | 2nd Place  |
| I helped the team that got the second place in the competition. I was responsible for the code interfacing with the camera and recognizing colors.  |  |            |
| 2014  | <b>Latin American Robotics Competition</b>             | 3rd Place  |
| I was part of the team that got the third place in the competition. I was responsible for the circuitry and programming of one of the robots.   |  |            |

## Interests

**System Analysis and Control Theory** I worked with standard PID with transfer function models and state-space models using static feedback and model predictive control. I also had a quick look at LMI (linear matrix inequalities) programming.

**Programming** C/C++, Python, Kotlin, Rust, Ruby, MATLAB...Languages are just tools in the belt. I can program using structured, object oriented and functional paradigms. I always try to use design patterns to make the code more organized and maintainable.