

# JOSÉ PIRES

## Mechatronics Engineer

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## PROFESSIONAL EXPERIENCE

Researcher in the Mechatronics field

### Centre for MicroElectroMechanical Systems

📅 Jan 2016 – Now

📍 University of Minho, Guimarães

**GradSint project:** software development for a laser sintering equipment. UI development in Matlab for FGM generation targetting the machine. **NorteEmpresa:** Development of electronic scenting device. Software development: firmware and UI. **HAMABICO:** software toolchain development for a multimaterial laser equipment: slicer/toolpath generator, post-processor and printer; firmware development. **ADD ADDITIVE:** study of manufacturing of sensoric alloys using hybrid additive/subtractive process. **COMP4TA:** study of advanced metal composites using hybrid additive/subtractive process. **LaserMulticer:** design and manufacturing of laser textured and functionalized ceramic substrates.

Researcher in the Mechatronics field

### Centre for Rapid and Sustainable Product Development (CDRSP)

📅 Apr 2015 – Dec 2015

📍 IPL, Leiria

**GradSint project:** software development for a laser sintering equipment. UI development in Matlab for FGM generation targetting the machine.

## EDUCATION

PhD in Mechanical Engineering

### Centre for MicroElectroMechanical Systems

📅 Feb 2017 – Now

📍 University of Minho, Guimarães

MSc in Mechatronics Engineering

### Centre for MicroElectroMechanical Systems

📅 Sep 2015 – Dec 2019

📍 University of Minho, Guimarães

Course grade:18;

MSc in Mechanical Engineering

### Laboratory of Engines and Applied Thermodynamics (LaMoTA)

📅 Sep 2006 – Dec 2014

📍 University of Minho, Guimarães

Course grade: 14

## PUBLICATIONS

Article

### Centre for MicroElectroMechanical Systems

📅 2022

📍 University of Minho, Guimarães

[A Global Methodology for 3d Multi-Material Laser Powder Bed Fusion Processes](#)

## SKILLS

- Software development
- Embedded systems development
- Automation and control
- Robotics and computer vision
- User Interface development
- Multi-platform development: Windows, Mac and Linux

## PROGRAMMING

- C/C++
- Assembly
- Verilog
- Matlab
- Python
- Perl
- Shell scripting
- Common Lisp
- Scala

## LANGUAGES

- Portuguese Native
- English Fluent
- German Intermediate

## STRENGTHS

- Hard-worker
- Autonomous and self-motivated
- Permanently curious

## MAIN INTERESTS

- Traveling
- Reading
- Chess
- Football
- Hacking/Tinkering