João Pedro **Moreira Ferreira**

SOFTWARE ENGINEER · COMPUTER VISION ENGINEER · MACHINE LEARNING ENGINEER · DATA SCIENTIST

✉ joaopmoferreira@gmail.com   ⌂ https://jpeumesmo.github.io/   ⌨ jpeumesmo

Work Experience

UFMG - VeRLab/Petrobras   *Belo Horizonte, Brazil*

RESEARCHER/DEVELOPER   *Dez. 2018 - Present*
- Research and develop state-of-the-art techniques to solve problems related to the reconstruction of construction sites, the schedule of construction sites, and teleoperation on construction sites.
- Design and develop systems to automatize the pipeline of reconstruction of a construction site.
- Design and develop hardware to collect data using a UGV (Unmanned Ground Vehicles), that also can be used by a human user.

UFSJ - NEAD   *São João del-Rei, Brazil*

DEVELOPER   *2017 - 2018*
- Maintenance and repair of Linux servers for the distance education infrastructure of the University.
- Develop minor changes on web pages.

Teaching Experience

UFMG - Computational Linear Algebra   *Belo Horizonte, Brazil*

ASSISTANT   *2019*
- Weekly meetings of 1-hour duration, to solve questions and help undergrad students with theoretical and practical exercises.
- Prepare and correct theoretical and practical exercises, help professors on the correction of exams.
- Teach a class about PageRank.
- Class with 180 students.

UFMG - Introduction to Visual Computing/Computer Vision   *Belo Horizonte, Brazil*

ASSISTANT   *2019*
- Teach classes about Machine Learning on Visual Computing to undergrad students.
- Help on the preparation of classes.

UFSJ - Analytical Geometry   *São João del-Rei, Brazil*

ASSISTANT   *2015*
- Weekly meetings of 2-hour duration, to solve questions and help undergrad students with theoretical and practical exercises.
- Class with 90 students.

Education

UFMG (Universidade Federal de Minas Gerais)   *Belo Horizonte, MG - Brazil*

M.SC IN COMPUTER SCIENCE   *Aug. 2018 - Present*
- To define.

UFSJ (Universidade Federal de São João del-Rei)   *São João del-Rei, MG - Brazil*

B.SC IN COMPUTER SCIENCE   *Mar. 2014 - Jul. 2018*
- Reconhecimento automatico de pistas para veículos autonomos utilizando têcnicas de visão computacional.

Honors & Awards

INTERNATIONAL

2017	**Honroable Mention**,	Symposium on Virtual and Augmented Reality	*Curitiba, Brazil*
2013	**First Certificate in English**,	Cambridge English Qualifications	*Cambridge, UK*

Publications

Winter Conference on Applications of Computer Vision   *Aspen, CO, United States*

Do As I Do Transferring Human Motion and Appearance between Monocular Videos with Spatial and

Temporal Constraints   *Mar. 2020*
- Computer Vision; Computer Graphics; Motion Transfer.

International Conference on Computational Science and its Applications   *Melbourne, Australia*

An RGB-Based Gesture Framework for Virtual Reality Environments   *Jul. 2018*
- Digital Image Processing; Computer Vision; Virtual and Augmented Reality.

Symposium on Virtual and Augmented Reality   *Curitiba, Brazil*

Uma Abordagem para Detecção Gestos Voltada a Ambientes de Realidade Virtual e Aumentada   *Nov. 2017*
- Digital Image Processing; Computer Vision; Virtual and Augmented Reality.

International Symposium on Computer Music Multidisciplinary Research   *São Paulo, Brazil*

The Framework of Copista An OMR System for Historical Music Collection Recovery   *Jul. 2016*
- Digital Image Processing; Computer Vision; Virtual and Augmented Reality.

Workshop on Ubiquitous Music (UbiMus)   *São João del-Rei, Brazil*

Desenvolvimento de Instrumentos Musicais Digitais a partir de dispositivos ubíquos   *Oct. 2018*
- Digital Image Processing; Computer Vision; Virtual and Augmented Reality.

Languages

Portuguese, Native Speaker
English, Near native / Fluent

Skills

Main Skills, Computer Vision, Machine Learning, Algorithms and Data Structure.
Programming Languages, Python, Java, JavaScript, C.
Management Software, Singularity, Docker, Git.
Libraries/Frameworks, OpenCV, PyTorch, Tensorflow.