

João Pedro **Moreira Ferreira**

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

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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 técnicas de visão computacional.

Honors & Awards

INTERNATIONAL

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

Curitiba, Brazil
Cambridge, UK

Publications

International Journal of Computer Vision

Volume 129

A SHAPE-AWARE RETARGETING APPROACH TO TRANSFER HUMAN MOTION AND APPEARANCE IN MONOCULAR

Apr. 2021

VIDEOS

- Computer Vision; Computer Graphics; Motion Transfer.

Computers & Graphics

Volume 94

LEARNING TO DANCE A GRAPH CONVOLUTIONAL ADVERSARIAL NETWORK TO GENERATE REALISTIC DANCE MOTIONS

Feb. 2021

FROM AUDIO

- Computer Vision; Computer Graphics; Motion Synthesis.

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

Mar. 2020

TEMPORAL CONSTRAINTS

- 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.