# o Pedro **Moreira Ferreira**

# 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

- · 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

2019

ASSISTANT

- 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

• 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 - Nov. 2020

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

Cambridge, UK

Curitiba, Brazil

First Certificate in English, Cambridge English Qualifications

### **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

• 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

Jul. 2018

• 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.