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

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

- 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

Aug. 2018 - Nov. 2020

M.Sc in Computer Science

• Computer Vision; Machine Learning and Data Science; Robotics; Generative Models; Graph Convolutional Networks.

UFSJ (Universidade Federal de São João del-Rei)

São João del-Rei, MG - Brazil

B.Sc in Computer Science

Mar. 2014 - Jul. 2018

• Digital Image Processing; Computer Vision; Algorithms and Data Structure; Software Engineering.

Honors & Awards

INTERNATIONAL

2017 Honroable Mention, Symposium on Virtual and Augmented Reality

First Certificate in English, Cambridge English Qualifications

Curitiba, Brazil 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

• 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.