# **Eduardo Rodrigues**

Avenida Mario Alvares Pereira de Lyra, 319, Cordeiro, Recife, Brazil

## Education

#### Center of Informatics of the Federal University of Pernambuco - CIn/UFPE

Recife, Pernambuco, Brazil

Undergraduate Student in Computer Science

2013 - present

# Experience \_\_\_\_\_

**Voxar Labs - CIn/UFPE** 

Recife, Pernambuco

RESEARCHER 2015 - today

- Academic research focused in mixed reality, 3D interfaces, multiple target tracking, computer graphics, computer vision and augmented reality. The results can be found in my personal website.
- Advisor: Veronica Teichrieb

**SUATI** Recife, Pernambuco

SOFTEARE ENGINNER (INTERNSHIP)

2015 - 2016

· Refactoring of the data layer code and implementation of new features on the company's major product.

#### **Young Talents for Science - CAPES**

Recife, Pernambuco

RESEARCHING

2015 - 2016

• Academic research program where I created a computer vision algorithm using openCV to count bat populations based on a statistical approach.

## Research and Development \_\_\_\_\_

Samsung Voxar Labs

RESEARCHER/DEVELOPER

Set. 2017 - present

• Image and video processing

Voxar Labs Voxar Labs

RESEARCHER/DEVELOPER

Jan. 2017 - Jul. 2017

Jul. 2016 - Dec. 2016

• Mixed Reality TVs

SimplifiqueGP Voxar Labs

3D rendering and BIM manipulation

Voxar Labs Voxar Labs

RESEARCHER / DEVELOPER

Mar. 2015 - Jun. 2016

• S.I.R.A.C

## Languages \_

#### **Portugues**

NATIVE

#### **English**

INTERMEDIATE

# Programming skills \_\_\_\_\_

#### Languages

C/C++, C#, PYTHON, JAVA

#### Libraries and tools

OPENCV, OPENGL, UNITY3D, GIT, VISUAL STUDIO, TERMINAL

# **Teaching experience**

#### **Teaching Assistent**

ALGEBRA FOR COMPUTER SCIENCE

Informatics Center - UFPE

Aug. 2014 - Dec. 2014

#### **Teaching Assistent**

PROGRAMMING INTRODUCTION

Informatics Center - UFPE

Jan. 2014 - Jul. 2014

## **Publications**

- [1] Mixed Reality TVs: Applying Motion Parallax for Enhanced Viewing and Control Experiences on Consumer TVs. Rodrigues, Eduardo, Lucas Silva Figueiredo, Lucas Maggi, Edvar Neto, Layon Tavares Bezerra, João Marcelo Teixeira, and Veronica Teichrieb. Symposium on Virtual and Augmented Reality (SVR). 2017.
- [2] Multi-objective tracking applied to bat populations. Rodrigues, Eduardo, João Marcelo Teixeira, Veronica Teichrieb, and Enrico Bernard. Symposium on Virtual and Augmented Reality (SVR). 2016.

# Projects \_\_\_\_\_

## **UnityRTGI**

A Unity Engine project where the user can import .0bj extension files in execution time without the need of compiling the asset when the project is builded. You just have to enter with the link of the .0bj file and the script will download it and render it on the scene. It also works with local files. (C#/Unity3D)

#### x:pression

A COMPUTER VISION ALGORITHM THAT MAKE A REAL TIME TRACKING OF THE USER'S FACE AND DETECT THE USER'S ACTUAL EMOTION BASED ON THE EXTRACTED FEATURES. (C++/CLM-FRAMEWORK)

#### MONO

A GAME JAM PROJECT THAT IS A PUZZLE/PLATFORM GAME WHERE THE PLAYER CHANGES THE WORLD COLORS BETWEEN BLACK AND WHITE TO OVERCOME THE PROPOSED CHALLENGES. (C#/UNITY)

#### **Features Extractor**

A COMPUTER VISION ALGORITHM USING OPENCV LIBRARY THAT EXTRACT FEATURES OF A GIVEN TEXTURE, CAPTURE THE WEBCAM IMAGE IN REAL TIME, FIND THE TEXTURE AS A SURFACE ON THE IMAGE, CALCULATE THE POSE OF THE DETECTED SURFACE AND RENDER A 3D OBJECT ON THE SURFACE USING THE TEXTURE AS AN AR MARKER. (C++/OPENCV/OPENGL)

## **3D Render**

3D Render: Basic rendering program of a 3D world with an object loader for .0bj extension files using OpenGL. (C++/OpenGL)

## Awards \_\_\_\_\_

## NATIONAL

Jul. 2016 **Codecup Hackaton**, Second Place Jun. 2015 **Codecup Hackaton**, First Place

Pernambuco, Brazil Pernambuco Brazil