# **Nuno Neto**

## **Personal Information**

Name Nuno André Rocha Neto

**Birthdate** 01-10-1992

## **Experience**

February 2019 - July 2019

### Research Group GILT @ Instituto Superior de Engenharia do Porto

Development and planning of an online multiplayer serious game as thesis project.

Usage of Unity3D game engine, which is based in C# scripts to develop the game and NodeJS for back end support, mainly with a REST API interface to collect user's data and leaderboard information, but also to provide communication between game and server through sockets.

Version management during game Development was made with Gitlab.

I also presented as a speaker an article for "Inclusive Digital Learning Through Serious Games: A Clipping for Inclusion" on the 13<sup>a</sup> Multi Conference in Computer Science and Information Systems that took place between 16<sup>th</sup> and 19<sup>th</sup> July at Porto. One of the games showcased in this article was the one developed for my thesis.

### January 2014 - July 2014

#### Universidade Virtual @ Universidade Fernando Pessoa

During my stay in 'Universidade Virtual', located in Universidade Fernando Pessoa, I spent 6 months developing Interactive educational modules which served as support for long distance learning. As part of a curricular internship for Web Application Programming Technology Specialization Course in Universidade Fernando Pessoa. Technological stack used was WAMP and the software used for the development of those modules was Articulate Storyline.

# **Academic Education and Course Developed Projects**

### **September 2017 - July 2019**

Master in Informatics Engineering – Computer Systems

• Instituto Superior de Engenharia do Porto

**Software Development Organization:** Practical work for this course consisted in a pipeline which had a series of consistency checks and validations in order to deploy a production and testing environment with the help of Docker.

(Final Grade: 16; Thesis Grade: 19)

Languages and Technologies: Bitbucket, Jenkins, Eclipse, Docker, PostgreSQL

**Distributed Systems Programming:** Apply service-oriented principles, REST architecture principles and hypermedia API principles were some of this course objectives. Practical project involved developing a REST API in order to execute matrix calculus and store them in MongoDB so that later it can be reused if inputted values are the same.

Languages and Technologies: NodeJS, MongoDB, Gitlab

**Mobile Systems:** Development of an Android application which consumed data from Google Places API about hotels and restaurants. Favored places were stored in a NoSQL database available in Firebase.

Languages and Technologies: Android Studio, Firebase, Google Places API, Github

**Reliable and Concurrent Software:** Find solutions to problems involving parallelism and concurrency, to understand the challenges associated with developing correct software, and to know methods and tools that simplify this task. Final project involved a software developed in Java to execute threads around a grid formatted map (10x10) where they had an initial and final destination and should never collide in the same grid spot. To solve this, information was sent back and forth between threads to initiate avoidance maneuvers before colliding.

Languages and Technologies: Java, Erlang

### **Systems Integration:**

Systems and Application integration considering reuse, maintainability and other technical, human and business factors.

Languages and Technologies: WSO2 ESB, WSO2 API Manager, Docker, NodeJS, MariaDB

Other relevant languages and technologies learned: C#, SQL Server, GNU3, Docker, Virtual Box, Python, Perl

(Final Grade: 13)

(Final Grade: 14)

### **September 2014 - June 2017**

Degree in Informatics Engineering

• Universidade Fernando Pessoa

**Integrated Project Lab**: My degree's final project involved a real-time browser strategy game. Developed using Laravel framework, I took all necessary steps from game logics to validation and unit tests. REST functionalities were also explored in order to retrieve information such as leaderboard and item data through JSON.

Languages and Technologies: Laravel, MySQL Server, Bootstrap, AJAX, javascript, jQuery

**Programming Lab:** This curricular course helped us understand web applications. The project involved developing a System where both teachers and students could communicate. Students were able to upload their work, while teachers would grade them accordingly. This platform was developed using Symfony framework. In order to create multiple users and test the system a python script was written using selenium.

Languages and Technologies: PHP, HTML, CSS, Symfony, Bootstrap, MySQL, Python

Other relevant languages and technologies learned: C, Java, SQL, MIPS Assembly

### **October 2013 - August 2014**

Web Application Programming Technology Specialization Course

• Universidade Fernando Pessoa