# **ANDY LEDESMA GARCÍA**

## **Computer Scientist**

MakeMake23

@ andy.ledesma.garcia@gmail.com @andyRsdEla **)** +53 53821860

Havana, Cuba

@make\_make23



## **EXPERIENCE**

## Part-time Android Developer

### **Hospital Book Project**

**Aug** 2022 - Jan 2023

Havana, Cuba

- Made a first version of an Android application to show an encrypted book on medicine.
- Published the application on the Cuban site Apklis for sale.
- Released a second version that allows integration with the Cuban Transfermovil payment gateway.

Stack: Kotlin, Java.

## Part-time Full-stack Developer

#### **BeRichCuban**

**Aug** 2019 - Mar 2021

- Havana, Cuba
- Implemented a large part of the front-end and back-end of two web applications.
- Worked on the integration with the Payeer Payment API to charge for the services of a website.
- Connected the Instagram API to a web page that allowed the management of likes and followers.
- Learned to work as a team using technologies like Git, Azure DevOps, Github, and Teams.

Stack: C#, ASP .NET Core, EF Core, Razor, Blazor, JavaScript, Bootstrap, Docker.

## **EDUCATION**

### B.Sc. in Computer Science

## **Havana University**

**Sep 2018 - Dec 2022** 

Havana, Cuba

#### Relevant coursework:

- Hyperledger Fabric for Developers
- Distributed Systems
- Data Structures and Algorithms
- Simulation

- Artificial Intelligence
- Machine Learning
- Databases
- Software Engineering
- Compilers
- Programming Languages

### Extracurricular activities:

- Researching on Infinite Variable Neighborhood Search for the Vehicle Routing Problem.
- Teacher's assistant for a whole year.

## MY LIFE PHILOSOPHY

"Today better than yesterday. Tomorrow better than today..."

# TECHNICAL SKILLS

**Programming Languages** C# **Pvthon** C Solidity Golang **JavaScript** x86 assembly

Kotlin C++

Frameworks, Tools and Technologies

Truffle gRPC Blazor EF Core Ethereum Docker Github Azure DevOps Bootstrap

Others

**Data Structures Programming** High Math Algorithms Back-end Development Blockchain Development | Logic Database Design Clean Code

## SOFT SKILLS

Collaboration **Quick Learning Problem Solving** Communication Hard-working Eye for Detail

# LANGUAGES

Spanish **English** 

# High School Diploma IPVCE Vladimir Ilyich Lenin

- **Sep 2014 May 2017**
- Havana, Cuba
- Linked to C++ programming contests since the first year.
- Member of the national preselection for international programming contests since the second year.
- Developed an application in Python to evaluate Chemistry contestants.

# **PROJECTS**

# Implementation of a Representative Voting System on Quorum

#### **Havana University**

- **M**ar 2022 Dec 2022
- A smart contract was designed to support a representative voting system.
- Votes are assigned fairly to candidates in a voting cycle.
- Only one winner is obtained by applying the Instant-Runoff Voting method.
- The winner is computed with a time complexity of  $O(n \log n)$ .
- The contract was deployed on a Quorum network.

Stack: Solidity, Truffle, JavaScript, Node.js.

#### e-tournaments

#### **Havana University**

**Apr** 2022 - Jul 2022

Distributed system that allows the organization of tournaments of any game between two virtual players. The computing and storage capacities of various computers are used.

- The players and the game can be defined by the user through a web interface.
- Consultation and visualization of all the results and statistics of the tournament in a web interface.
- A Distributed Hash Table and leader election algorithms were implemented to ensure fault tolerance to some extent.
- The implementation of remote procedure calls created by Google (gRPC) was used.

Stack: Golang, gRPC, Python, Streamlit, Docker, Docker-Compose, BuntDb.

### Cine+

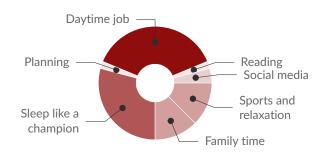
#### **Havana University**

iii Apr 2021 - Jun 2021

Cinema ticket sales system.

- The hours and rooms available are shown.
- Automatic seat assignment.
- Discount support for special days and specific people.
- Sale of tickets and cancellation of purchases.
- Points system that can be exchanged for tickets.

# A DAY OF MY LIFE



# **REFEREES**

## Jorge Alejandro Reyes Gonzáles

@ Hospital Book Project

Doctor and writer.

"When writing my second book I wanted to sell it digitally converted into an application, for this work I hired Andy Ledesma García. Apart from fulfilling my order on time and efficiently, he was in touch all the time providing new ideas and suggestions to make my app stay as good as possible. It is to admire his ingenuity, his ability and his discipline when it comes to working, because he is not someone who limits himself to what they ask for, he goes much further. I would not hesitate to hire him again if the opportunity arises."

#### PhD. Yaidir Mustelier Ruiz

@ Havana University

Assistant Professor at the Institute of Cryptography.

Leader of the project "Implementation of a Representative Voting System on Quorum".

#### **MSc. Fernando Rodriguez Flores**

@ Havana University

✓ fernan@matcom.uh.cu

Head of the Applied Mathematics Discipline of the Computer Science Career.

Leader of the project "Infinite Variable Neighborhood Search by Generating Criteria from Smallest to Largest".

- Consultation of sales statistics.
- Management by the administrators of the information of the films and rooms that are in the system.
- 3D preview of how the movie looks from any seat in a room.

 $Stack: \ C\#, \ ASP\ .NET\ Core,\ EF\ Core,\ Razor,\ JavaScript,\ Bootstrap.$ 

# Infinite Variable Neighborhood Search by Generating Criteria from Smallest to Largest

## **Havana University**

- Feb 2020 Nov 2021
- Algorithm for solving the Vehicle Routing Problem.
- It's a variant of the Infinite Variable Neighborhood Search.
- Good results were obtained.

Stack: .NET, C#.