

M. HUMBERTO BARRANTES

COMPUTER ENGINEER 📍 GRECIA, 20301, COSTA RICA ☎ (506)85292845

◦ DETAILS ◦

Grecia, 20301
Costa Rica
(506)85292845

sudohumberto@gmail.com

Date of birth

January 15th, 1995

Nationality

Costa Rican

◦ LINKS ◦

[instagram](#)

[git](#)

[kaggle](#)

◦ SKILLS ◦

Python

C/C++

Tensor Flow

Scikit Learn

Pytorch

JavaScript

Java

C#

Verilog / VHDL

MIPS / ARM / RISK-V

Bash

Julia

R

Raspberry Pi / Arduino

GNU / Linux

Windows

Yocto

FPGAs

Sensors

Electronic equipment

◦ LANGUAGES ◦

Spanish; Castilian

English

Italian

German

👤 PROFILE

Computer Engineer with five years of experience in design and implementation of software and hardware. Knowledge of embedded systems, FPGAs, computer architectures, Artificial Intelligence models, and multiple programming languages.

📁 EMPLOYMENT HISTORY

Professor at Cenfotec University, San Jose, Costa Rica

2021 — Present

Professor of Applied Machine Learning

Software Engineer at Big Data Inc. US., San Jose, Costa Rica

2020 — Present

- Design and implementation of Artificial Intelligence models for image recognition, price prediction, and sentiment analysis.
- Design and implementation of web platforms for massive virtual events.

Software Developer at Freelancer, San Jose, Costa Rica

2015 — 2020

- Web application development using JavaScript, CSS, HTML and ASP.NET.
- Development of desktop applications for Windows and Linux using C#, C/C++ and Python.
- Implementations of enterprise search APIs using open-source search engines: Solr and Elastic Search.

🎓 EDUCATION

Artificial Intelligence Professional Program, Cenfotec University, San Jose

2020 — 2021

- Machine Learning, Deep Learning, Applied Deep Learning
- url: <https://www.ucenfotec.ac.cr/>

Bachelor of Computer Engineering, Technological Institute of Costa Rica, Cartago

2012 — 2020

- Thesis conducted at CES, Karlsruhe: "Design of an approximated Hardware Generation Tool"
- url: <https://www.tec.ac.cr/>

Bachelor of Secondary Education, Mary Immaculate High School of Grecia, Grecia

2007 — 2011

- url: <https://www.cmigrecia.com/>

⚙️ COURSES

Italian Certificate (B2), Dante Alighieri Institute, San Jose

2021

Oxford OTE Certification (B2)

2020

Pattern Recognition, Technological Institute of Costa Rica

2018

Introduction to Embedded Systems, Technological Institute of Costa Rica

2018

Advanced Databases, Technological Institute of Costa Rica

2017

◦ HOBBIES ◦

Sports (Soccer, hiking and Ping Pong), Movies and Series, Classic Books, Science Fiction or Fantasy, Videogames and Puzzles.



RESEARCH

Clodomiro Picado Institute, San Jose

2021 — Present

Convolutional Architecture for the recognition of Poisonous Snakes in Costa Rica.

Chair for Embedded Systems, Karlsruhe

July 2021 — July 2021

Automatic Hardware Generation with Python.

Supervisor: Jorge Castro Godínez. (url: https://ces.itec.kit.edu/21_godinez.php)



PUBLICATIONS

2021

Castro-Godínez, J., Barrantes-García, H., Shafique, M., & Henkel, J. *AxLS: An Open-Source Framework for Netlist Transformation Approximate Logic Synthesis*. (<https://ieeexplore.ieee.org/document/9386244>)

2021

Castro-Godínez, J., Barrantes-García, H., Shafique, M., & Henkel, J. (2021). *AxLS: A Framework for Approximate Logic Synthesis based on Netlist Transformations*. IEEE Transactions on Circuits and Systems II: Express Briefs.



NON-TECHNICAL SKILLS

July 2021 — July 2021

- **Communication:** Proficient at sharing my ideas, asking for help, or coordinating a working group. In my current position we have daily meetings where I effectively communicate my progress. As a teacher, I try to share my ideas as clearly as possible.
- **Adaptability:** I am passionate about technology and all changes it implies. I really like to explore state of the art solutions. I do not mind the changes and challenges, in fact, I started my current work designing and implementing web applications even though I had never programmed in C # or ASP.NET.
- **Problem Solving:** Due to the nature of my work I am very used to dealing with problems that must be solved in the shortest possible time, for example correcting errors on websites without users noticing them. In addition, in my current Artificial Intelligence specialization, the tasks do not have a guide on how to solve them, only what we must solved.



REFERENCES

Jeferson Gonzalez Gomez from Technological Institute of Costa Rica

jgonzaleztec.ac.cr

Jorge Castro Godínez from Technological Institute of Costa Rica

jocastro@itcr.ac.cr

Xavier Morera Torres from Big Data Inc. US.

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Gerardo Nereo Campos Araya from Accenture AI

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PRIVACY

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