

# Miguel Casanova

contact@mcasanova.me

## Skills

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Programming	C, Python, MATLAB, R, Wolfram Mathematica, VBA, LD, ST
HDL	Verilog
Markup	L <sup>A</sup> T <sub>E</sub> X, Pandoc Markdown, Org
Software Tools	NI Multisim, Microsoft Office, Vim, Emacs, GIMP, SQL
Languages	Spanish, English, French, German, Portuguese, Italian

## Work Experience

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07/2019 - 09/2021	Industrial Programmer at Teclis, Portugal - PLC, HMI/SCADA and handling robot Programmer
07/2018 - 09/2019	Python Developer and CSO at aiMonkey, Venezuela - Projects: Arbitrage trading bot, balanced scoreboard, crowd-sourced journalism platform

## Education

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10/2023 - Ongoing	Università degli Studi di Padova, Italy - PhD. Information Engineering
10/2021 - 09/2023	Università degli Studi di Padova, Italy - MS. Control Systems Engineering
10/2013 - 01/2019	Universidad Simón Bolívar, Venezuela - BS. Electronic Engineering

## Volunteering

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11/2018 - 07/2019	English and French substitute teacher at Colegio Integral el Ávila, Venezuela
2016 - 2018	Founding member of GECO-USB and leader of the Linguam project, Venezuela
2014 - 2019	Teaching assistant at Universidad Simón Bolívar, Venezuela - Electric measurements laboratory [04/2019 - 07/2019] - Digital circuits [09/2016 - 12/2016] - Mathematics III: Linear algebra [01/2015 - 03/2015] - Physics I: Kinematics, dynamics and energy [09/2014 - 12/2014] - Physics II: Rigid bodies, hydrostatics and thermodynamics [09/2014 - 12/2014]

## Academic Projects

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2023 - 2024	Quantum error correction via Riemannian optimisation
2022 - 2024	Protection of quantum information via control of neighbouring systems
2018 - 2019	Design and simulation of quantum processors that implement quantum search algorithms
2018	Autonomous ball seeking vehicle
2018	Remotely controlled gamma radiation experiment for didactic purposes

## Certificates

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2023	EFEQT – European Master Certificate in Quantum Science and Technology
2019	Johns Hopkins University at Coursera - Getting and Cleaning Data - R Programming - The Data Scientist's Toolbox
2019	The University of Sydney at Coursera - Data-driven Astronomy
2019	IELTS – 8.0/9.0
2017	DALF C2 – 58/100
2016	Goethe Zertifikat B2 – 74.5/100
2016	DELFB B2 – 69/100

## Honours and Awards

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2023	Bosch Future Mobility Challenge (Team Leader) – 2nd Place
2022	Bosch Future Mobility Challenge – 1st Place
2021 - 2023	MAECI Scholarship
2016	Merit Scholarship of the Goethe Institut Caracas
2013 - 2018	Proexcelencia AVAA Scholarship