Leonardo Anyelo Rodriguez Martinez

Master's student in artificial intelligence and robotics

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Date of Birth:
26.04.1993 In Colombia

Education

3/2024 - Present	Master program Artificial Intelligence and Robotics (M.Sc.) Hochschule Hof, Germany
2/2010 – 10/2015	Mechatronics Engineering Universidad de San Buenaventura **Academic Achievements**: - Achieved the 3rd position out of 37 graduates for having the highest GPA in the program. - Honorable mention received in the 6th semester for maintaining an exceptional GPA.

Additional courses:
Coursera by Meta:

11/2023	Back-End Developer Professional Certificate
	Coursera by IBM:
10/2022	Python for Data Science, AI & Development
	Platzi:
7/2023	Machine learning with Python
4/2023	Definitive HTML and CSS course
2/2023	Backend Development career with Python and Django
8/2022	Git and GitHub Professional Course

Knowledge and interests

Foreign languages	Spanish: (mother tongue) English: C1 German: B2
Hobbies:	Reading, lifting weights, playing guitar and playing video games.

Work experience

Master's Thesis – Gruner GmbH (03/2025 – Present)

- Developing an AI-based system to predict tools and machining parameters from 3D CAD models
- Automating feature extraction and dataset creation from SolidWorks and CNC data
- Analyzing manufacturing processes in collaboration with Gruner's engineering team
- Performing data analysis and evaluating neural network architectures.

Student Research Assistant at Hochschule Hof (10/2024 – 02/2025)

- Chatbot and LLM Development: Developed a user interface and integrated a Large Language Model (LLM) to automatically generate dynamic PowerPoint presentations based on natural language inputs.
- Enhanced API functionality to simplify interaction between the LLM and PowerPoint templates

Robotics and programming Teacher at Montessori British School (09/2021 – 31/01/2024)

- Taught robotics classes in English to high school students from 6th to 11th grade.
- Taught programming languages: Python, C, C++, Java and JavaScript.
- Design and creation of electronic circuits.
- Implementation and development of the program to teach the languages of Python and JavaScript to 10th and 11th grade students.
- Development of a program capable of automatically submitting over 700 grades from an Excel spreadsheet to the school platform in less than 10 seconds through an API, streamlining and significantly reducing the time required for the manual grade submission process.
- At the same time, I have been working on different programming projects, developing scripts to automate processes, developing APIs and web pages focused on backend development.

Design Engineer at Emprecol Mechanize (05/2019 - 09/2019)

- Mechanical design in CAD software for the manufacture of forming and sealing molds for pharmaceuticals.
- Design of plans in Solid Works for the manufacture of mechanical parts.
- Development of a fatigue study for mechanical reinforcements.

Project Engineer, Entrepreneur at BH2 Robotics (04/2017 - 05/2019)

- Electronic and mechanical design.
- Microcontroller programming in Python, C, and C++.
- Design of electrical circuits, assembly of surface circuits.
- Robot appearance design.
- Mobile application design, and development of robots for interaction with people.

Assistant Project Engineer at Servicloro Group (05/2016 - 03/2017)

- Project design, simulation, and costing of projects.
- Drawing plans in Autodesk Inventor, AutoCAD, and Solid Works
- Preparation of mechanical and electrical drawings, automation, programming, and preparation of equipment operation manuals.

Electronic Technician at Security Access (11/2015 - 05/2016)

- Installation of fences, issuing and verifying machines for parking cards.
- Preventive and corrective maintenance of ATMs, checkpoints, and parking machines in general.
- Installation of cameras, maintenance of computers and printers.
- Microcontrollers programming.

Assistant of Design and Development Area at PELPAK (07/2014 - 02/2015)
- Assisted in programming diagrams.
- Design of mechanical parts, and automation processes, with a focus on control of three-phase motors.

Hof, 1.05.2025