



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

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|------------------|--|
| 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: <ul style="list-style-type: none">- 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. |
| 11/2023 | Additional courses: Coursera by Meta: Back-End Developer Professional Certificate Coursera by IBM: Python for Data Science, AI & Development Platzi: Machine learning with Python |
| 10/2022 | Definitive HTML and CSS course |
| 7/2023 | Backend Development career with Python and Django |
| 4/2023 | Git and GitHub Professional Course |
| 2/2023 | |
| 8/2022 | |



Knowledge and interests

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|--------------------------|---|
| Foreign languages | Spanish: (mother tongue) English: B2-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

SOFTWARE MANAGEMENT

Python
Java
C/C++
Visual studio code
Git
Github
PyTorch
Django
FastAPI
Flask
Arduino
Eclipse
NetBeans
Raspberry Pi 3
Pic C
Dev C++
MicroC PRO
Labview
Matlab
MPLAB
Solid edge
Solid Works
Autodesk Inventor
AutoCAD
Proteus
Festo
fluid sim
step7
Codesys
Unity
Adobe Illustrator
Vex IQ Robots
Mbots
RobotC

Projects

<https://github.com/Engleonardorm7>

Portfolio

<https://engleonardorm7.github.io/ReactPortfolio/>

- 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 Serviclora 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