

GONZALO TORRAS SERRANO

Advanced Master's in Artificial Intelligence | KU Leuven

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2021/2022 - High School

Colegio de Fomento Aldovea

- **Academic Record:** Technological Baccalaureate with an average grade of 9.57/10.
- **International Experience:** Academic exchanges in London (2015-2016) and Lausanne (2018-2019).
- **Volunteering:** Participation in humanitarian construction projects in Kenya (2 weeks).

2022/2023 - Computer Engineering

Universidad Francisco de Vitoria (UFV)

- **Excellence Scholarship:** Entry scholarship for achieving a grade above 8.5 in high school.
- **Mathematics and Physics:** Courses in Calculus, Linear Algebra, Discrete Mathematics, and Electronics.
- **Programming fundamentals:** Programming in C along with Object-Oriented Programming in C#.

2023/2024 - Computer Engineering

Universidad Francisco de Vitoria (UFV)

- **Low-level programming:** Fully functional [Tetris](#) in Z80 Assembly, managing direct memory access, registers, and hardware interrupts to play in real time.
- **Advanced programming:** Operating Systems (Concurrency, Programming); Data Structures and Algorithms (Complexity Analysis); Computer Architecture in assembly with Z80.

2024/2025 - Computer Engineering

Universidad Francisco de Vitoria (UFV)

Sep 2024/Enero 2025 - Erasmus Université Gustave Eiffel

- **[Quadtree & BitStreaming](#):** Quadtree algorithm in C for bitmap image compression in grayscale.
- **[Cascadia Game](#):** Cascadia game in Java for 2 people, following Object Oriented Programming.

Return to Spain

- **Internship at Minsait Cybersecurity Indra Group:** Vulnerability analysis on servers and compliance using Python and PowerBI, while also creating a dataset for mitigation prediction. Additionally, analysis of Docker and Kubernetes clusters. This internship ends on 1st June 2026.
- **Best project award ([FreeMove](#)):** Implementation of a metro application with search algorithms (A* custom) integrating real-time metro data for users with disabilities.
- **AI Specialization:** Machine Learning techniques (CNNs, MLPs, SOMs & NLP) with supervised learning and unsupervised learning.

Summer 2025

Chatbot Splendor Suites

- **Personalized Assistant for Real Estate:** AI-powered data search system to optimize operational workflows and data queries.
- **NER & NLU:** Fine-tuning of RoBERTa-base with NLU and NER, achieving an F1-Score of 0.92 in entity classification.
- **Synthetic data pipeline:** Data augmentation strategy using synonym replacement and Llama-70B as a 'teacher' model to expand training samples from 400 to more than 10,000.
- **Resource optimization:** Privacy-focused solution capable of running inference on a local server with only 8GB of RAM, eliminating dependencies on external APIs.

2025/2026 - Computer Engineering

Universidad Francisco de Vitoria (UFV)

- **Undergraduate Thesis (paper in progress):** Multi-agent system for hands-free Windows control. Integrates Vision-Language Models (VLMs), PDDL (Fast Downward) and Whisper for real-time execution of voice commands, assisting users with motor disabilities.
- **IDavinci 2025:** First place developing a recipe chatbot solution for Babel, deploying a functional prototype in 72 hours.

Skills

Technical

- **Programming Languages:** Java, C, Python, Assembly (Z80), C#.
- **AI and Data Science:** Tensorflow, Pandas, Scikit-learn, Machine Learning, PyTorch, CrewAI.
- **Tools and systems:** Git, Linux, Docker, Ollama, Fast Downward.

Certificates

- **Data Science Certification:** MITx "[Understanding the World through Data](#)" de EDX.
- **IBM Certificate:** Certified in Chatbot Architecture and NLP deployment (IBM SkillsBuild).

Languages

- **English C1:** Score of 103 on the TOEFL, with 26 in speaking, 26 in listening, 26 in reading, and 25 in writing.
- **French:** DELF B2 level.