Nicolás Maire Bravo

Computer Science Student | Developer & AI/ Cybersecurity Enthusiast | Entrepreneur

Professional Summary

Computer Science student at UC3M (upcoming Erasmus at Università di Bologna (Bologna, Italia) and UADE (Buenos Aires, Argentina)) with a dual focus on AI and Cybersecurity. Passionate about building my own tools and exploring new fields. I believe in turning ideas into reality.

Technical Skills

Languages:

Python, C, C++, JavaScript, SQL, R, HTML/CSS

Tools & Frameworks:

React, Flutter, FastAPI, n8n, Hugging Face, Celonis

Systems & DevOps:

Git, GitHub, Linux, Docker, POSIX

Languages

Spanish	Native
English	C1 Certified
Chinese	HSK3 (Studied until HSK5)
French	Intermediate
Italian	Intermediate

About Me

Charismatic, punctual, and organized. I am a fast learner with a strong dedication to improvement. I adapt easily to new environments and excel at working within a team.

Experience (Entrepreneurial)

VIA Project (VisiónIAutomatización) *2024–Present*
Lead Developer & Automation Architect

- Architected the full-stack "VIA" platform, including the advanced, animated public-facing website with an integrated AI chatbot
- Developed the secure client-employee portal using React and FastAPI
- Engineered the backend automation services, connecting n8n workflows with custom Python scripts and Hugging Face models

AI Detector Bypass Tool *2024*
AI Researcher and Developer

- Developed a tool to rewrite LLM-generated text to be undetectable, based on a deep analysis of token generation and probability distributions
- Developed text transformation algorithms preserving semantic coherence

AI Agent Automation Builder (Personal Tool) *2024*
Python, AI Agents, Visual Interface (Streamlit/React)

- Developed a personal tool with a visual interface that uses interconnected AI agents
- The tool analyzes business logic and auto-generates complex automation workflows, serving as my primary tool for building solutions

Education & Certifications

B.Sc. in Computer Science (Bilingual Program) *2022 – Present*
Universidad Carlos III de Madrid (UC3M)

- Participation in academic economics olympiad 2022
- Honor's distinction in Calculus
- Santander Grant for my academic GPA
- Upcoming Erasmus+ Mobility Program at Università di Bologna (Bologna, Itaty)
- Upcoming international movility in UADE (Buenos Aires, Argentina)

Key Certifications *2023-2025*
Self-study & MOOCs

- Elements of AI (Intro & Building AI) (University of Helsinki)
- C1 Advanced (Certificate in Advanced English) (Cambridge English)
- Chinese HSK3 Certificate (Hanban)

High School Diploma (Science & Tech) *2020 – 2022*
Colegio Legamar, Leganés

- 9.76/10: Graduated with access to the Extraordinary Awards in Madrid
- 13.13/14 in EVAU (University admission tests)
- Honor's distinction in ICT subject
- Honor's distinction in Business Economics subject

Academic & Technical Projects

Mario Bros. Recreation *2022*
Python, Pyxel, OOP

- A recreation of the classic Mario Bros arcade game in Python (Pyxel), focusing on an Object-Oriented architecture to manage physics, collisions, and enemy logic

Script Interpreter *2023*
C, POSIX, Shell

- Developed a command interpreter in C that executes Linux scripts, implementing process management (fork, wait), IPC (pipes), and I/O redirection (dup, open)

POSIX System Calls *2023*
C, POSIX, Kernel

- Implemented file utilities (create, combine) in C using only low-level POSIX system calls (open, read, write, lseek) to interact directly with the kernel

Heuristic Search (A*) *2023*
Python, A Algorithm, AI*

- Developed a route-planning system for a spy plane using the A* algorithm and admissible heuristics, navigating a cost map generated by Gaussian radar models

Multi-threaded Factory Simulation *2024*
C, Pthreads, Concurrency

- Solved the classic Producer-Consumer problem in a factory simulation using pthreads, a circular buffer, mutexes, condition variables, and POSIX semaphores

Hybrid Cryptography Application *2025*
Python, Crypto, AES, RSA

- A Client-Server CLI in Python for secure file exchange, implementing hybrid encryption (AES-GCM & RSA-OAEP) and authentication (PBKDF2-HMAC-SHA256)

Ray Tracing Rendering Optimization *2025*
C++23, Performance, AOS/SOA

- Optimized a 3D Ray Tracing application in C++23 by implementing and comparing two memory representation strategies: Structure of Arrays (SOA) and Array of Structures (AOS)

Linear Programming *2025*
Optimization, ILP, GLPK

- Modeled and solved a bus fleet optimization problem by applying Integer Linear Programming (ILP) techniques, using GLPK and Calc for resolution

Responsive Web Development Practice *2025*
HTML5, CSS3, JavaScript, jQuery

- Developed a responsive website for a backpacking travel platform, using semantic HTML5 and CSS3 with multiple breakpoints for mobile and tablet, apart from JavaScript and jQuery implementations.

Contact

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