Jose Ignacio Ramírez Fuentes

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About Me

I'm Nacho, a mathematician and software developer living in Málaga. I aim to specialize in numerical methods for conservation laws and computational fluid dynamics, while also maintaining an interest in full-stack web development. I've taught math, IT, and programming. With a background in mathematics and education, I'm passionate about problem-solving, coding, and sharing knowledge.

For more info about me visit my Webpage ↗.

Experience

Research Assistant — *Málaga, Spain*
University of Malaga — *Apr 2024 – Present*

- I have studied core concepts of Fluid Dynamics and Conservation Laws, specially for the Riemann problem
- Automated the extraction and processing of large climate datasets from API using Python scripts
- Managed the maintenance, optimization, and migration of PHP-based CMS platforms like Joomla and WordPress, ensuring stability, security, and performance

Full Stack Developer — *Madrid, Spain*
Cloudari — *Apr 2023 – Apr 2024*

- Managing relational databases using SQL and phpMyAdmin
- Integrated APIs with AJAX and JavaScript for dynamic web applications
- Developed back-end solutions in PHP, ensuring functionality and performance
- Design of front-end interfaces with HTML, CSS, Bootstrap, and JavaScript
- Implemented version control workflows using Git for team-based development and codebase management

High School Teacher — *Málaga, Spain*
C.D.P. Santa María De Los Ángeles — *Sep 2023 – Dec 2023*

- Taught mathematics, focusing on arrays, calculus, and problem-solving for first-year pre-university student
- Instructed C++ and HTML5 programming, covering fundamental concepts for last-year high school students
- Managed and maintained the school's IT infrastructure, ensuring optimal performance and security

Education

University of Malaga — *Sept 2022 – Dec 2024*
MS in Mathematics

- **Coursework:** Navier-Stokes Equations. Theory and Numerical Implementation

University of Malaga — *Sept 2022 – July 2023*
Master in Secondary and Higher Education (sp. Mathematics)

University of Malaga — *Sept 2017 – July 2022*
BS in Mathematics

- **Coursework:** Z-Transform and applications to signals and systems

Certifications

Fundamentals of Accelerated Computing with CUDA C/C++ *See title ↗*
NVIDIA Deep Learning Institute

Relational databases and data modeling *See title ↗*
Nebrija University

PHP Language *See title ↗*
Intalentia Innovation

Projects

Lid-Driven Cavity   *GitHub* ↗

- ○ Simulation of the Lid-Driven Cavity problem using the Navier-Stokes equations for incompressible fluid flow and the Fractional Step Method

Technologies

Languages: Python, C, C++, SQL, HTML5, R, JavaScript

Frameworks & Tools: Git, GitHub, PhpMyAdmin, Visual Studio Code, Bootstrap, Tailwind CSS