Markel Mencía Ramírez — Bilbao, Spain

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EDUCATION

University of Deusto — Bilbao, Spain **September 2023 — June 2027**
Bachelor of Computer Engineering GPA: 8.74/10

HONORS

Honor distinction in computer architectures, computability and complexity, database management, and multiple programming subjects.

PUBLICATIONS

- **Markel Mencía Ramírez**. *Fundamentos de GNU/Linux*: Full book on the fundamentals of the GNU/Linux operating system and the use of terminal environments, ideal for beginners willing to start using Linux systems. [PDF]

PROJECTS

gochat: TCP-Based, E2E Application Protocol — ⊙ Golang

- Designed and implemented from scratch a terminal user interface chat application that runs its own application protocol over a TCP connection, with End-To-End RSA encryption and TLS support.

LITE-16: RV32I-inspired Instruction Set Architecture — ⊙ Verilog, C

- Designed a RISC-based, syscall-supporting Instruction Set Architecture in Verilog, with intuitiveness in mind. The project contains an assembler programmed in C, along with pre-built testbenches.

rvik: RV32I Assembler and Simulator — ⊙ Java, Swing

- Developed an assembler for the RV32I RISC-V variant that offers a graphical user interface to write and simulate RV32I programs.

PARTICIPATION AND OTHER ACHIEVEMENTS

- Completed over 200 CTF-style challenges on the pwn.college website, on topics such as binary exploitation, program interaction and reverse engineering, that deeply enriched my knowledge on operating systems, process execution and good cybersecurity practices. [link]
- Participated in numerous Capture The Flag (CTF) cybersecurity competitions, including on-site competitions such as the Midnight Flag CTF 2025 Finals in Rennes, France, with the team 0xDECODE, currently standing in 4th place in the national ranking in CTFtime. [link]
- Written in-depth writeups about CTF challenges I find interesting on my blog. [link]
- Given talks and courses at my university based on the contents of my book, about bash fundamentals [slides], git [slides], and other topics.
- Participated in hackathons such as the HackUDC 2025 hackathon in A Coruña ⊙ or the NASA Space Apps Challenge in Bilbao ⊙.

SKILLS

- **Programming languages and other technologies:** Golang, Java, C/C++, Python, HTML, CSS, JavaScript, Django, Shell, Linux, Git
- **Computer architecture and performance:** CUDA, Verilog, VHDL
- **Deployment:** MySQL, PostgreSQL, Neo4j, MongoDB
- **Languages:** Spanish (Native), English (C2), Euskera (B2)