Eduardo **Rodríguez Sánchez**

Computer Engineer · HPC Master Stundent

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"Forty-two, said Deep Thought, with infinite majesty and calm."

Education

UNILU(Université du Luxembourg)

Belvaux, Luxembourg

M.S. in High Performance Computing

Sep. 2025 - May 2026

- Currently in my firest semester under the program EUMaster4HPC for a double degree.

GT(Georgia Insitute of Technology)

Georgia, United States of America

B.S. in Computer Science

Aug. 2023 - May. 2024

- Comprehensive knowledge of computer systems architecture and implementation with focus on distributed computing environments.
- Proficient in systems-level programming and designing robust networked applications for modern computing infrastructures.
- GPA: 4/4

UC3M(Universidad Carlos III de Madrid)

Madrid, Spain

B.S. in Computer Engineering

Sep. 2020 - Jun. 2023

- Solid foundation in mathematics and statistics; as well Artificial Intelligence, Software Engineering, Cyber Security, among many others.
- GPA: 9.1/10

Skills

Low-level / Systems	Linux & Microkernels, Virtualization, Containers
Distributed Systems	Kubernetes, Load Balancing, Distributed Storage, 5G Networking
Observability / Monitoring	Grafana, Prometheus, gRPC
Programming	C, C++, Go, Python
Languages	Spanish, English

Experience

Samsung Electronics (Zhilabs)

Madrid, Spain

Software Engineer

Jun. 2023 - Oct. 2024

- **Recursive Descent Binary Parser for Network Traces:** Developed a fully functional recursive descent binary parser to efficiently access and collect network error data from traces. Enhanced system performance by providing quick and reliable data extraction for troubleshooting and network optimization.
- **Parallel Network Traffic Simulation:** Upgraded an existing network traffic simulator from sequential execution to parallel simulation across multiple antennas, significantly improving performance and enabling scalable testing of network scenarios.
- **High-Performance Network Trace Proxy:** Designed and implemented a high-performance proxy for network traces, achieving 86 Gb/s throughput for unencrypted packet forwarding. Presented as Bachelor's Thesis during Summer 2024.
- **RAN (Radio Access Network) Assistant:** Participated from PoC stage, designing and implementing a multi-agent system leveraging LLM, NLP, ML, and heuristics. Features included Telco Q&A, anomaly detection, root cause analysis, and solution proposal.

Ericsson

Seoul, S.Korea

Software Developer

Dec. 2024 - Present

- **5G Core Research and Development:** Developed features for User Plane Analytics and optimization in 5G core networks, including antenna geo-redundancy algorithms, multi-thread contention reduction, and resolution of trouble reports such as segment violation errors.
- **5G RIB Solution Design:** Led the migration and adaptation of a 5G Routing Information Base (RIB) codebase from a remote team to our Madrid office. Redesigned the implementation to enable intra-forward communication between modules within the Kubernetes network, eliminating reliance on external networks or the internet.