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| CONTACT INFORMATION | Email: barachina.sergio@gmail.com Website: https://sergiobarra.github.io/ Barcelona (Spain) | Tel: +34 608108238     |
| SHORT BIO | Leveraging my background as a Telco/AI PhD and Research Scientist, I specialize in the convergence of 5G/6G, Wi-Fi, and AI/ML. As head of a research lab and datacenter with a team of 5+, I also lead the MLOps infrastructure that supports our work. My contributions include publishing over 50 papers and leading lab efforts in 10+ EU/Spanish research projects. Additionally, I bring over a decade of experience teaching undergraduate engineering students. | |
| PROFESSIONAL EXPERIENCE | Senior Researcher in Services as NetworkS (SaS) at CTTC • Head sysadmin and MLOps with a cloud-native focus. <i>Leading a team of 6 people.</i> • Design, develop, and manage 5G/6G proofs-of-concept (including O-RAN, satellite, AI/LLM-based frameworks, core, verticals, edge/cloud, etc.). • Coordinate research projects, securing funding and delivering technical reports. Course Instructor at UOC • Teach networking courses, mentoring 150+ students annually in telecom concepts. Lead QA engineer, Wi-Fi expert at Centum Solutions • Define standards and procedures for (automated) testing. • Communicate with stakeholders to understand and clarify performance requirements. Software developer engineer intern at Ricoh Spain • Java ME development and service/project support. QA intern at Vendo Services • Write and execute test scripts and plans in development, staging, and production. | Mar 2021 - <i>currently</i> Feb 2021 - <i>currently</i> Jan 2021 - Mar 2021 Feb 2015 - Oct 2015 Jun 2014 - Oct 2014 |
| EDUCATION | PhD in the Wireless Networking research group (UPF) • Thesis (<i>cum laude</i>): <i>Responsive Spectrum Management for WLANs</i> . Link . • Research stay at Rice Networks Group in Rice University (Houston, United States). • Teaching assistant for computer networks (10 semesters). MSc , Intelligent and Interactive Systems at UPF BSc , Telematics Engineering at UPF (<i>Top of class</i>) | Oct 2016 - Jan 2021 Sep 2015 - Jul 2016 Sep 2011 - Jul 2015 |
| SKILLS | Experienced in cloud-native telecom and datacenter systems, combining DevOps, MLOps, and AI-driven automation. Skilled in 5G/6G integration, sustainable testbed design, and multi-agent intelligent infrastructure management. Key technical skills include: • Programming : Python, Java, C/C++, Go, Matlab, LaTeX • AI & MLOps : LLMs, Ollama, RAG, multi-agent frameworks, CI/CD pipelines, NVIDIA CUDA, PyTorch • Cloud & DevOps : Linux, LXC, TCP/IP, Docker, Kubernetes, OpenStack, Ansible, Puppet, Prometheus, Grafana, Kafka <i>Preparing for CKA certification.</i> • Telecom & 5G : Open5GS, Free5GC, OpenAirInterface, Amarisoft, SRS • Collaboration & Workflow : Git, GitLab, Jira, Agile, Kanban, Scrum | |
| LANGUAGES | Spanish (C2), Catalan (C2), English (C1), German (A2) | |
| REFERENCES | • Luis Sanabria-Russo, <i>DevOps Engineer at O(1)</i> • Francesc Wilhelmi, <i>Researcher at Nokia</i> • Edward Knightly, <i>Head of Networks at Rice University</i> | sanabriarusso@gmail.com francesc.wilhelmi@gmail.com knightly@rice.edu |