

RAFAEL CARDOSO

📍 Porto Alegre, Brazil 👤 23 years old

☎ +55 51 999577109

✉ rafael.cardoso@inf.ufrgs.br

🐙 [GitHub](#)

🌐 [LinkedIn](#)

Experience

Mconf Tecnologia

📅 October 2023 – Present (~ 1 Year, 2 Months)

Tech Lead

📍 Porto Alegre

- Enhance and maintain back-end software components for videoconferencing products.
- Operate within the internal infrastructure of products by managing Docker containers in Kubernetes clusters.
- Provide leadership to a team of software engineers, fostering a collaborative work environment.
- Manage project timelines, resource allocation and priority definitions to ensure on-time delivery.
- Collaborate with cross-functional teams to provide integration of components into the larger product ecosystems.

Mconf Tecnologia

📅 March 2023 – October 2023 (~ 7 Months)

Back-End Software Developer

📍 Porto Alegre

- Enhance and maintain software components for load balancing among servers in videoconferencing products.
- Conceptualize and design the architecture of new components integrated into the products.
- Operate within the internal infrastructure of products by managing Docker containers in Kubernetes clusters.

Mconf Tecnologia

📅 March 2022 – March 2023 (~ 1 Year)

Software Development Intern

📍 Porto Alegre

- Enhance and maintain software components for load balancing among servers in videoconferencing products.

UFRGS

📅 May 2021 – March 2022 (~ 10 Months)

Institutional Development Project Scholar

📍 Porto Alegre

- Collaborate in the design and implementation of an infrastructure of IoT devices in the School of Engineering.
- Integrate device processing with servers, databases and web applications, taking into account security requirements.

Featured Projects

Distributed Architecture Observability — Go, Python, Kubernetes, Prometheus, Grafana

June 2024

- Instrumentation of a distributed microservices application for load balancing among servers.
- Integration and visualization of exported metrics using Prometheus and Grafana in a Kubernetes environment.
- Observability over system metrics such as API usage load and resource consumption of individual services.

Microservice Security Performance Assessment — Go, Python, Docker, Kubernetes

January 2024

- Bachelor's degree final course work.
- Implementation of distinct versions of a baseline application employing the [OWASP patterns](#) for authentication and authorization in microservice architectures.
- Implementation of a metric collection architecture and design of load experiments in a Kubernetes environment.
- Evaluation of the performance and resource usage impacts of each studied pattern.

Cloud Servers Autoscaler — Python, Machine Learning, AWS, OCI

November 2023

- Implementation of a server autoscaler to handle the variable load of users in videoconferencing products.
- Design of a predictive model to determine the expected number of users in the future based on the current time, date, and usage volume.
- Integration of the application architecture with the cloud providers (Amazon Web Services and Oracle Cloud Infrastructure) where the servers are hosted.
- Observed 50% reduction in infrastructure costs.

Education

UFRGS

📅 September 2024 – Present (~ 4 Months)

Master's Degree in Computer Science

📍 Porto Alegre

UFRGS

📅 March 2019 – February 2024 (~ 5 Years)

Bachelor's Degree in Computer Engineering

📍 Porto Alegre

Skills

Languages: Portuguese (Native), English (Advanced), Spanish (Intermediate)

Developer Tools: GitHub, DockerHub, Flux CD

Programming Languages: C, C++, Go, Java, Python, Ruby

Technologies: Linux, PostgreSQL, Docker, Kubernetes, Prometheus, Grafana