# **Gustavo Gardusi**

+55 48 9 8862 3496 gustavo.gardusi@gmail.com https://github.com/gardusig.https://www.linkedin.com/in/gardusig

## SUMMARY

As a software engineer with over 5 years of experience, I bring a unique perspective with a solid track record in building successful businesses. By venturing into the realm of investing, I leveraged my insights to make a profitable <u>night club</u>. I have also earned recognition in programming competitions, including top placements at Facebook Hacker Cup, high rankings (1st division) on coding platforms like Codeforces and CodeChef, and four-time finalist at ICPC Latin America.

## WORK EXPERIENCE

#### Orkes

Cupertino, California, USA January 2022 - July 2023

Software Engineer (remote contractor from Brazil)

- As the first Brazilian in a fully remote team, I have played a pivotal role in advancing the development of Netflix Conductor, a powerful workflow orchestration platform. Specifically, I have led the initiative for polyglot clients by single-handedly creating an open-source collection of projects that enables users to scale up multiple workflow task workers concurrently.
- Optimized concurrent resource allocation by making batch requests at clients while keeping track of available resources, avoiding to open too many threads, bringing ~20% reduction in processing time. Broke compatibility, fixed issues, created a foundation for all end-to-end tests and increased test coverage to virtually 100% of relevant code. All automated through robust CI/CD practices at GitHub Actions to ensure high-quality code and efficient software delivery.
- 2nd highest contributor of <u>Java SDK</u>, creator of <u>Python SDK</u> and <u>Go SDK</u>, co-creator of <u>C# SDK</u> and <u>JS SDK</u>. Started by using swagger codegen to generate tons of HTTP code to communicate with the server. Made a few improvements to handle authentication and connected the dots through an infinite loop for each worker. Also contributed to <u>Netflix OSS</u> by fixing message queue ack issues on batch requests at the server and helped to design <u>synchronous workflow execution</u>.

## Amazon

São Paulo, São Paulo, Brazil

Software Development Engineer II

April 2021 - January 2022

- As an SDE2 at Amazon.com.br, I played a pivotal role in expanding the Fulfillment By Amazon program in Brazil by
  enabling sellers from multiple states. My focus centered on overcoming the challenge of managing diverse invoice
  expiration and cancellation time period rules, ensuring seamless and compliant operations for sellers across the country.
- Additionally, I made significant contributions to improve the resilience of two critical Java microservices responsible for
  invoice generation, with potential negative customer impact. By recognizing the imminent peak season, I introduced a new
  approval step into their CI/CD pipelines. It acted as a safeguard, blocking subsequent deployment processes if the services
  failed to meet either the minimum expected transactions per second or the maximum allowed latency.
- To optimize resource allocation, I leveraged historical metrics data to calculate an average distribution of requests, revealing a critical value the expected load a single host could handle before failing to respond. By collaborating with a neighboring team, we obtained valuable insights and translated their data into the specific load requirements for each service, ensuring adequate scaling and avoiding unexpected overloads or unnecessary costs.
- As a result of our meticulous preparations, the services demonstrated enhanced resilience during the high-pressure period
  of Black Friday 2021, successfully serving customers without issues while securing a sustainable load for oncall tickets.

## **Beyond**

São Paulo, São Paulo, Brazil

Software Engineer (contractor)

August 2019 - April 2021

- As the first member of a fast-growing financial technology company, I spearheaded the development of a high-frequency trading web application certified by B3, the Brazilian stock exchange. This ambitious project demanded an odd tech stack, including C++ as the trading bot brain and WebSocket as the communication channel. Messages to humans were in json format, while Financial Information eXchange protocol was used for order management. The main goal was to make operations in small chunks up to a predefined limit, sending messages on trade events to always have an order waiting to be executed at both sides. Replacing orders was tricky, updating an already filled order leads to a rejected message, which means potential waste of time. Always canceling an order to send a new one also increases latency and is not welcomed.
- Developed dozens of APIs at services written in Java using SpringBoot to handle the stock market data. I made it possible
  to simulate how a trading strategy would potentially perform on any given day. Same idea as the trading bot, but with
  artificial results. It became like an agnostic strategy evaluator, storing which performed the best, which had more risks and
  a few recommendations for each customer. I didn't even know what IntelliJ was. Just coded, tested, built and deployed.

# **Algar Telecom**

Software Engineer

Uberlândia, Minas Gerais, Brazil September 2017 - August 2019

As the pioneering Software Engineer on the internet backbone team, I created distributed applications in Python to collect information from 300 routers and configure them in real time. Given my lack of knowledge and willingness to learn, I went from not knowing what SSH is to quite a few automations. By storing data in databases linked to Metabase, it enabled reports with resource usage through beautiful dashboards while also showcasing potential bottleneck issues.