

CARLOS DAMÁZIO

<https://carlosdmz.io> ◇ hello@carlosdmz.io

EDUCATION

Centro Universitário de Brasília - UniCEUB

February 2014

B.ASc. in Computer Science
Programming teaching assistant
Overall GPA: 4.25

EXPERIENCE

Amberdata

March 2023 - Present

Senior Software Engineer @ Blockchain Data team

Remote

- I take part in: evaluating; proposing; re-using; contributing to relevant open source projects. I.e: Re-used a dynamic EVM ABI decoding project — Designed and implemented a new blockchain indexing pipeline for EVM chains using Rust and Go — Implemented Substreams' new sinks, such as a binary file (Apache Parquet) and Redpanda proto file to topic sink.
- Maintaining blockchain's data REST API legacy endpoints;
- Migrating and creating new REST API endpoints from a monolith to microservices: Increases teams independence - Reduces tech-debt by: simplifying engineers' onboard/setup; Less complex unit and integration testing - Encourages experimentation in controllable environments.
- Developed heuristic approaches for EVM functions' ABI decoding in transaction data;
- Designed and implemented data normalization pipelines for blockchain data such as BTC, BCH, LTC, and ETH;
- Re-designed and implemented web scrapers to scrape supply information from blockchains: — Added extendable code to customize response parsing — Added proxying — Added exponential backoff — Improved performance by switching and simplifying tech-stack used.
- Developed ETL standalone programs to mass export chain data to object storage — Achieved a 22TB data transfer for a single chain under 4 hours.

LibLab

December 2022 - February 2023

Software Engineer @ Service team — Lead Infrastructure Engineer

Remote

- Planned architecture for cloud infrastructure across the organization from environments to services — Asserted high standards for maintainability — Reduced technical debt;
- Set up engineering documentation for infrastructure;
- Made Continuous Integration improvements — Added processes to achieve better code quality and setting a high bar on application and infrastructure code development — Improved code quality by 40% with fewer reviews and developer comments;
- Implemented Continuous Deployment pipelines — Improved developer productivity by 63%, decreasing infrastructure costs since no manual deployment intervention is required;
- Active contributor in back-end and infrastructure projects — 80% accuracy on delivery estimates;
- Mentored software engineers on hard and soft skills to give them room to grow in the company and their careers.

Alpaca

February 2022 - October 2022

Software Engineer @ North American Platform team — Trading & Assets team

Remote

- Developed and implemented broker and trading API by writing new features that have been requested from clients;
- Developed internal tooling for employees to automate portions of their work, improving productivity and eliminating bottlenecks across operational tasks;
- Implemented internal services to reduce coupling between software components, reducing downtime, and technical debt by 14

- Enabled Local Currency Trading by implementing sub-accounting, thus creating a revenue line for foreign clients (non-US);
- Redesigned and took part in the database engine of the portfolio history API, possibly creating a revenue line for using the portfolio data (cut short).

PayPal

October 2021 - February 2022

Software Engineer @ Data Infrastructure team

Remote

- Datalake design and implementation with mixed data sources (both structured and non-structured data), along with data pipelines that fetch data (through APIs, AWS RDS instances, and more), transform it (through AWS EMR, using Apache Spark's data frame model, SQL, streaming, etc), and store into multiple data sources (AWS S3, Snowflake, and AWS Redshift) — This positively impacted the company by introducing new input data for Data Scientists in the GCP environment with Big Query.
- Data pipeline for Google Analytics and Zendesk data using AWS AppFlow
- Data pipelines for third-party services that fetch Venmo App usage metrics, using AWS Lambda functions to fetch, transform, and send data to Snowflake
- Data pipelines for the entire organization's data, using AWS solutions to get data from multiple sources such as SQL and NoSQL data. Python and Luigi were used for fetching, transforming, and committing data to a Snowflake instance.

BMW Group

August 2020 - October 2021

Technical Lead @ DevOps team

Remote

- Developed and maintained the service mesh that layered the operations of all BMW's microservices, which was comprised of a hundred plus services in a multi-AZ setting;
- Developed and maintained the build environment;
- Developed an authentication environment for services and clients, for intra and extra-service communication using a Terraform-managed Keycloak;
- Developed and improved the logging and monitoring systems to support the service mesh environment;
- Provided technical leadership for the service mesh team.

Capgemini @ Banco do Brasil

February 2019 - August 2020

Software Engineer @ APM team

Remote

- Designed and implemented a data platform for the entire bank's infrastructure data;
- Implemented a data pipeline for transactional data for a mobile application. Specifically, I took part in the messaging system design, implementation, and hardening;
- Implemented a monitoring management system for all equipment within the bank's inventory, using Python solely;
- Implemented a data pipeline for mainframe's network data.

4Linux @ Banking client

March 2018 - February 2019

Software Engineer

Remote

- Developed a web application to provided remote maintenance of ATM machines, including installing security packages, updating packages, restarting machines, creating new distribution images, and configuring them into an ATM machine;
- Developed a web application which provided the management of mailboxes in Microsoft Exchange without high expertise in using Powershell or the Exchange shell.

TECHNOLOGIES AND CONCEPTS

Computer Science	Operating Systems, Computer Networks, Algorithms, Distributed Systems, Embedded Systems
Programming Languages	Rust, Go, Python, Bash, C, C++
Data Engineerings	Apache Spark, Apache Kafka, PostgreSQL, MongoDB, OracleDB, MySQL, Cassandra, GCP Big Query, Snowflake, Databricks, Apache Parquet, AWS S3, Stream processing, Apache Spark structured streaming, Deltalake
DevOps Engineering	AWS, Microsoft Azure, Linux, Bash, Terraform, AWS CDK, GitOps, Git, GitHub, GitLab, Jenkins, Concourse CI, GitHub Actions, HashiCorp Consul, Fluentd, ELK stack, Grafana, Loki, Prometheus
Operating Systems	Linux, macOS

OPEN-SOURCE SOFTWARE CONTRIBUTIONS

CPython	https://github.com/python/cpython
Kubernetes	https://github.com/kubernetes/kubernetes
Substreams-ethereum	https://github.com/streamingfast/substreams-ethereum

COURSES AND LICENSES

GitLab Certified Associate @ GitLab
Apache Spark Associate Developer @ Databricks

RECOMMENDATIONS RECEIVED

Zachary Keeton @ LibLab	I managed Carlos on a substantial cloud architecture/DevOps project, and his passion and outstanding initiative consistently impressed me. Carlos's dedication to optimizing our workflow and automating processes greatly contributed to the velocity of our dev teams. His expertise in cloud technologies (especially AWS) and commitment to continuous improvement make him an invaluable asset to any team. I would gladly work with Carlos again.
Péter Turi @ Alpaca	Working with Carlos was a great experience, he didn't just show great velocity when it comes to delivering quality, but he is always keen on jumping on new architectural challenges, or understanding new technologies. One prime example of this behavior was, when he took the initiative to decide on which could base database engine to use for one of our projects, did the required research for different possibilities, then implemented the database engine as required in Golang.
Márton Waszlavik @ Alpaca	I have been working with Carlos at Alpaca, where he was part of the API team, engineering high throughput software services written on Golang, deployed in Kubernetes runtime. Carlos is a productive engineer who can proactively contribute to the team's work. I'd happily recommend!
Jackson To @ Alpaca	Carlos was a software engineer at Alpaca, and his skills and knowledge were unparalleled. Along with that, however, he brought an energy and dependability that made him crucial to part of our team. He is a reliable and highly capable engineer, I can't recommend him highly enough.