Resume / CV

Contact Information

Full Name: Gustavo Gomes Basso

Email: gu@gubasso.xyz Site: gubasso.xyz

Social: LinkedIn, GitHub, GitLab, Stack Overflow, Leetcode

Location: Brasília, DF / Brazil

Professional Summary

Experienced software engineer with over a decade in the field, with a robust background in backend development and a strong focus on Rust programming. Proven track record as a CTO and Co-founder, demonstrating leadership in technology strategy and implementation. Skilled in developing algorithms for financial markets, particularly in Web3 assets, showcasing advanced analytical and problem-solving abilities. Passionate about leveraging deep technical expertise in Rust to build efficient, scalable, and innovative backend solutions. Adept at driving projects from conception to deployment, ensuring alignment with business objectives. Seeking to leverage extensive software development experience in a dynamic backend developer role.

Work Experience

CTO and Co-founder

Company: cwnt.io

Dates of Employment: 10/2016 - Present

Roles: Co-founder, CTO (Chief Technology Officer), Software Development Manager, Project Manager, Software Developer,

Systems Administrator, Technology Educator

Projects: Boleteggs, Algorithmic Trading, Brag-Server, Ripissue

Technical Consultant

Company: Seu Visto Certo

Dates of Employment: 01/2015 - Present

Roles: Software Developer, Software Development Manager, Project Manager, Systems Administrator, Technology Educator

Projects: Process Automation

Technical Consultant

Company: CADE

Dates of Employment: 01/2018 - 01/2023

Roles: Systems Analyst, Technology Educator, Data Analyst/Engineering, Software Developer, Project Manager, Systems

Administrator **Projects:** Cadelab

Teachings: Svelte/Sapper Training Program, Python Eve Training Program

Research Consultant

Company: IPEA

Dates of Employment: 10/2011 - 12/2019

Roles: Data Analyst/Engineering, Academic Researcher, Software Developer, Software Development Manager, Project

Manager, Systems Analyst, Systems Administrator, Technology Educator

Projects: Data Analysis, IpeaGEO, Ipea Data Extractor, Ipea Publishes, Ipea Projects, IpeaData, Portal of Metropolitan

Governance in Brazil, IVS

Teachings: Riot.js Training Program

Consultant

Company: IAED

Dates of Employment: 10/2011 - 12/2017

Roles: Data Analyst/Engineering, Software Developer, Technology Educator, Academic Researcher

Projects: ALM, Actuarial Flow, Future Rentability **Teachings:** SAS Enterprise Guide Training Program

Technology Coordinator

Company: CERME

Dates of Employment: 01/2015 - 12/2016

Roles: Project Manager, Software Development Manager, Systems Analyst, Systems Administrator, Technology Educator

Projects: ODR

General Coordinator of Monitoring and Evaluation of Regional Policies

Company: SDR

Dates of Employment: 01/2014 - 12/2014

Roles: Administrative Manager, Project Manager, Systems Administrator, Data Analyst/Engineering

Projects: ODR

Teachings: Speaker at LAUC 2014 - Esti Latin America User Conference: 'Regional Development Observatory (ODR)', Speaker at the VII Regional Symposium on Geoprocessing and Remote Sensing (GEONORDESTE): 'Geotechnologies as

development strategies for the semiarid: the Regional Development Observatory'

University Professor

Company: UnB

Dates of Employment: 01/2012 - 12/2014 Roles: University Professor, Academic Researcher

Teachings: Quantitative Methods for Decision Making, Finances 1, Financial Calculus

Skills

Technical/Programming Skills

Programming Languages: Rust, Python, C#, PHP, Javascript, Typescript, Shell Scripting Backend Development: Rust, Python, Python Eve, Python Flask, Node.js, .NET Framework

Geographic Information Systems (GIS): IpeaGEO, ArcGIS Desktop, PostGIS

Web/Frontend Development: Wordpress, Joomla, HTML, CSS, Javascript, Typescript, Svelte/Sveltekit, React, Riot.js,

Firebase (Google)

Software Development: Git, Agile methodologies, Test Driven Development (TDD), Github, Gitlab

Infrastructure Management Skills

DevOps and Infrastructure Management: Docker, Continuous Integration/Continuous Delivery (CI/CD) pipelines, Vagrant,

Shell Scripting

Systems Administration: Linux-based OS's and Servers, System Security Management

Server Software Management: ESRI Geoportal Server, ArcGIS Collector, ArcGIS StoryMaps, ArcGIS Dashboards, ArcGIS

App Builder

Data Engineering Skills

Database Management and Data Persistance: SQL, Microsoft SQL Server, PostgreSQL, SQLite, Mongodb

Languages for Data Analysis and Manipulation: R, SAS

Financial/Investment Skills

Financial/Market Analysis: Financial modeling, Risk assessment, Fundamental and technical analysis

Investment Strategies: Asset allocation, Portfolio management

Financial Software: Bloomberg Terminal

Analytical/Research Skills

Research Methodologies: Qualitative Research, Quantitative Research, Optimization Methods

Statistical Modeling and Methods: Regression analysis, Time-series analysis, Econometrics, Forecasting Techniques

Soft Skills

Communication: Excellent written and verbal communication

Leadership: Team leadership and project management

Problem-Solving: Creative and analytical approach to challenges **Time Management:** Efficient in managing multiple tasks

Collaboration: Proven ability to work effectively in team environments

Roles

Co-founder

- Shaped and communicated the company's vision, mission, and culture.
- Guided strategic planning and decision-making to drive growth and development.

CTO (Chief Technology Officer)

- Directed overall technology strategy, aligning it with business goals.
- Managed the company's R&D initiatives and technological infrastructure.
- Oversaw the development and implementation of tech solutions.

Software Development Manager

- Managed the full software development lifecycle, ensuring alignment with project and business objectives.
- Implemented coding, testing, and deployment best practices.
- Led and mentored a team of software developers and engineers.

Project Manager

- Oversaw project lifecycles from inception to completion.
- Defined project scopes, set objectives, and managed resources.
- Coordinated and led cross-functional project teams.

Administrative Manager

- Managed teams and contracts.
- Standardized organizational processes and documentation.
- Implemented agile methodologies for operational efficiency.

Software Developer

- Developed and tested software applications.
- Created solutions meeting both user and business requirements.
- · Ensured code quality and implemented best practices.

Data Analyst/Engineering

- Handled data inspection, cleaning, and modeling.
- Performed data collection and statistical analysis.
- Developed ETL scripts and applied statistical methods for data analysis.

Systems Analyst

- Analyzed business needs and documented technical requirements.
- Designed and evaluated technology solutions.

Systems Administrator

- · Managed server configurations and system security.
- Handled service deployment and software maintenance.
- Administered security protocols and automated routine tasks.

Technology Educator

- Taught a range of technology subjects.
- Shared project-specific knowledge with technical staff.

University Professor

• Taught academic courses and conducted research.

Academic Researcher

• Engaged in scholarly research and academic contributions.

Projects

Brag-Server

Title: Brag-Server: Git Repository Metrics REST API in Rust

Project Nature: REST API Development, Git Repository Metrics Tool, Data Management and Analysis, Open-Source

Software Project

Description: Open-source REST API, written in Rust, designed to load, update, and serve data from Git repositories. It efficiently retrieves and manages repository metrics, offering JSON-formatted data for client applications. The project focuses on real-time data processing and accessibility, providing valuable insights into Git repository activities.

Links: Brag-Server Github

Ripissue

Title: Ripissue: CLI Tool for Issue Tracking

Project Nature: CLI Tool for Issue Tracking, Project Management Tool, Task and Sprint Organization Tool, Distributed

Workflow Implementation

Description: A command-line interface (CLI) tool specifically designed to streamline issue tracking within Git repositories. It introduces a simple file structure convention and workflow, enabling efficient management of issues, tasks, sprints, epics, and initiatives. Utilizing just the git system and filesystem, Ripissue facilitates distributed issue management, making it a versatile tool for developers leveraging Git's distributed nature.

Links: Ripissue Github, Ripissue Crates.io

Cadelab

Title: Cadelab: Interactive Platform for Economic Competition Analytics

Project Nature: Full Stack Technologies, Economic Data Visualization and Analytics Platform, REST API for Economic Indicators and Public Data, Automated Data Workflow System, Data Engineering and ETL Processes Tool

Description: Interactive platform designed for economic competition analytics, featuring a frontend web application that displays data and indicators relevant to market competition. The frontend showcases data through visual components and charts for easy interpretation. On the backend, it employs Python Eve and Flask frameworks to power a REST API serving upto-date public data. The platform includes an automated data workflow to sync and update sources, coupled with data engineering scripts for ETL processes, generating aggregated data and essential indicators.

IpeaData

Title: IpeaData

Project Nature: Data Repository Platform, Web Application, Web API, Data Analysis and Visualization Tool, Metadata Management System

Description: IpeaData is a versatile web platform and API offering a rich repository of various public data sets, including economic, financial, demographic, geographic, and social statistics. It features robust data processing capabilities, such as extraction, organization, cleaning, and aggregation from diverse sources. The platform presents data in intuitive charts and provides detailed metadata for deeper insights. This comprehensive project entailed revamping the original version to enhance data accessibility and visualization, catering to a wide range of users.

Links: IpeaData Gitlab, IpeaData Gov.br, IpeaData Ipea, IpeaData API, IpeaData First Version

IVS

Title: Atlas of Social Vulnerability (IVS - Atlas da Vulnerabilidade Social)

Project Nature: Web Portal for Social and Economica Data, Data Visualization Platform, Social Analysis Tool, Joomla CMS-Based Web Application

Description: Dynamic web platform designed to display and analyze social vulnerability data in Brazil. Built on top of Joomla CMS, it offers user-friendly visualization of the IVS index and related social data through charts and other accessible formats. The platform's main objective is to make complex social vulnerability information easily understandable and accessible to the public, aiding in social analysis and policy-making.

Links: Atlas da Vulnerabilidade Social - IVS, IVS Ipea

Portal of Metropolitan Governance in Brazil

Title: Portal of Metropolitan Governance in Brazil (Portal da Governança Metropolitana no Brasil)

Project Nature: Web Portal for Metropolitan Data, Regional Governance and Policy Analysis Tool, Economic and Social Data Repository, Joomla CMS-Based Web Application

Description: Specialized web platform designed to offer in-depth access to a range of economic and social data, indicators, and studies focused on Brazil's metropolitan regions. Built on Joomla CMS, this platform is dedicated to facilitating the understanding and analysis of metropolitan area data, emphasizing regional development and governance. It serves as a valuable tool for researchers, policymakers, and the public interested in the dynamics of Brazil's urban centers.

Links: Portal da Governança Metropolitana no Brasil

Algorithmic Trading

Title: Automated Asset Trading Algorithms

Project Nature: Financial Algorithm Development, Automated Trading System, Real-Time Market Data Analysis, Financial Data Repository Management

Description: Algorithms for automating decision-making in asset trading. Key features include real-time data reading from various assets and markets, creating a suite of indicators based on price movements, and developing algorithmic strategies for autonomous buying and selling of assets. Additionally, a comprehensive data repository was established to facilitate the creation and optimization of these trading strategies.

Boleteggs

Title: Boleteggs: Rental Billing & Contract Management Web App

Project Nature: Rental Billing and Contract Management Web Application, API Integration for Automated Billing, Tenant Management System

Description: Web application designed for rental billing and contract management. It facilitates the generation and management of rental contracts, integrating with Gerencianet's billing API for automatic document creation. The app provides efficient tenant billing management and is developed as a React-based single-page application (SPA), enhancing user experience and operational efficiency.

ODR

Title: Regional Development Observatory (ODR - Observatório Do Desenvolvimento Regional)

Project Nature: Web Platform, GIS Applications, Full Stack Technologies

Description: Advanced web platform that leverages ArcGIS technology to provide comprehensive regional and spatial data. It serves as a hub for economic and social policy indicators, offering an array of web-based solutions for detailed regional analysis.

Links: ODR MI, Gov.br ODR

Process Automation

Title: Client Assistance Process Automation

Project Nature: Process Automation System, CRM Integration Solution, Client Communication Management Tool, Sales

Workflow Automation

Description: Automating an entire client assistance process, encompassing pre-sale, sale, and post-sale stages. It involved the integration of the sales process with CRM tools and communication applications, and a backend implementation for managing data and message distribution between the Whatsapp Business API, CRM, and other management tools.

Ipea Projects

Title: Ipea Projects (Ipea Projetos)

Project Nature: Project Management System, Institutional Initiative Tracker, Organizational Coordination Tool

Description: Internal institutional system developed for the comprehensive management of all organizational projects and initiatives at Ipea. It streamlines the coordination, monitoring, and administration of various projects, ensuring efficient management and tracking of institutional efforts.

Ipea Data Extractor

Title: Ipea Data Extractor (Ipea Extrator de Dados)

Project Nature: Data Query and Aggregation Platform, Public Data Repository, Custom Data Table Builder, Business

Intelligence Tool

Description: Web platform designed for querying, aggregating, and collecting a diverse array of data. Utilizing technologies like Suite Pentaho, Mondrian, and Saiku, it provides access to public databases, research content, indicators, and historical data series. The platform's unique feature allows users to construct their own data tables, offering flexibility in aggregating and cross-combining data to suit specific analysis needs.

Links: Ipea Extrator de Dados, App Extrator de Dados

Ipea Publishes

Title: Ipea Publishes (Ipea Publica)

Project Nature: Internal Publication Management System, Document Review and Standardization Tool, Workflow

Automation Application

Description: Internal web application specifically designed to streamline and standardize the review process for institutional publications at Ipea. It serves as an automation tool, significantly enhancing the efficiency and consistency of how Ipea's publications are managed and reviewed.

IpeaGEO

Title: IpeaGEO: Spatial Data Analysis

Project Nature: Spatial Data Analysis Software, GIS Application, Map Visualization and Generation Tool

Description: Windows desktop application developed in .NET C# for advanced spatial data analysis. It specializes in the manipulation and georeferencing of spatial data, offering GIS capabilities. The software enables users to visualize and

generate maps, facilitating comprehensive geographic information system analysis and data interpretation.

Links: IpeaGEO

Future Rentability

Title: Automated Future Rentability Estimation for ALM models **Project Nature:** Financial Modeling Tool, Analytics System

Description: Innovative system for automated future rentability estimation in Asset-Liability Management (ALM) models. This solution has been implemented in major Brazilian pension funds, enhancing asset allocation and portfolio management strategies.

Actuarial Flow

Title: Automated Deterministic and Stochastic Actuarial Flow for ALM models

Project Nature: Actuarial Analysis Tool, Financial Forecasting System

Description: Solution for automating both deterministic and stochastic actuarial flows in Asset-Liability Management (ALM) models. This tool has been effectively integrated into some of Brazil's major pension funds, aiding in strategic asset allocations and enhancing portfolio policy decisions.

ALM

Title: Automated Asset-Liability Management Model for Pension Funds **Project Nature:** Financial Management System, Asset Allocation Tool

Description: System for the automated management of asset-liability in pension funds, utilizing an ALM model to optimize asset allocation. This system has been adopted by major pension funds, significantly improving their asset management strategies

Data Analysis

Title: Economic Research Data Analysis and Reporting

Project Nature: Economic Research Reporting, Data Analysis and Visualization, Script-Based Data Collection and

Processing Tool

Description: Creation of comprehensive databases, studies, and reports for economic research. It involves the generation of reports, data sets, and charts to support research and studies. The project also includes the development of scripts for efficient data collection and processing, as well as statistical and spatial analyses to enrich economic research efforts

Education

Title: Doctor of Business Administration (Finance and Quantitative Methods) [Incomplete]

University: Universidade de Brasília - UnB

Location: Brasília, DF, Brazil **Attended:** 2014 - 2017

Notes: Completed all coursework credits.

Areas Of Study: Operations Research, Optimization Methods, Pension Funds, Stochastic Models

Title: Master of Science in Business Administration (Finance and Quantitative Methods)

University: Universidade de Brasília - UnB

Location: Brasília, DF, Brazil

Graduated: 2013

Dissertation Title: Evidence of Underpricing and Underperformance in IPOs: An Empirical Study of the Brazilian Market.

Areas Of Study: Financial Economics, Empirical Finance, Brazilian Market Analysis

Title: Bachelor of Business Administration **University:** Universidade de Brasília - UnB

Location: Brasília, DF, Brazil

Graduated: 2011

Monograph Title: Corporate Governance in Brazil: The Impact of Adherence to the Market Arbitration Chamber on the Risk

of Publicly Traded Companies

Areas Of Study: Corporate Governance, Risk Management, Financial Markets

Publications

Title: Spatial and Non-Spatial Clustering: An Applied Study to Brazilian Agriculture. Discussion Papers 2279, Institute for

Applied Economic Research - IPEA. [Access Link] **Area:** Economics and Quantitative Methods

Title: How beautiful but wrong answers put the world in crisis again. Periodic Democratic Policy. 2011.

Area: Economics and Finance

Title: ODR Bulletin: Regional Development Observatory. [Access Link]

Area: Regional Development and Policy Analysis

Teachings

• Speaker at the VII Regional Symposium on Geoprocessing and Remote Sensing (GEONORDESTE):

'Geotechnologies as development strategies for the semiarid: the Regional Development Observatory'

- Speaker at LAUC 2014 Esti Latin America User Conference: 'Regional Development Observatory (ODR)'
- SAS Enterprise Guide Training Program: Conducted tailored training on SAS Enterprise Guide for pension funds staff.
- **Riot.js Training Program** : Delivered training on Riot.js and general-purpose JavaScript frameworks for web development.
- Svelte/Sapper Training Program: Taught Svelte for SPA development and Sapper for hybrid SPA/MPA architectures.
- **Python Eve Training Program**: Instructed on building Python Web REST APIs using Eve, Flask and MongoDB integration.
- **Quantitative Methods for Decision Making**: Taught graduate-level operations research, quantitative analysis, and statistical methods for decision-making.
- **Finances 1**: Introductory course on corporate finance, financial markets, and investment analysis.
- Financial Calculus: Foundational finance course covering basic concepts like interest rates and investment returns.

Languages

Portuguese: nativeEnglish: advanced

Companies

Seu Visto Certo

Company: Seu Visto Certo **Location:** Willow Park, TX, US

Links: Seu Visto Certo

cwnt.io

Company: cwnt.io (Crown and Trunk Technologies)

Location: Brasília, DF, Brazil

Links: cwnt.io Github, cwnt.io LinkedIn

CADE

Company: Administrative Council for Economic Defense (CADE - Conselho Administrativo de Defesa Econômica)

Location: Brasília, DF, Brazil

Links: CADE

IPEA

Company: Institute for Applied Economic Research (IPEA - Instituto de Pesquisa Econômica Aplicada)

Location: Brasília, DF, Brazil

Links: IPEA

IAED

Company: Institute of Economic Analysis of Law (IAED - Instituto de Análise Econômica do Direito)

Location: Brasília, DF, Brazil **Links:** IAED LinkedIn

CERME

Company: Center for Market Regulation Studies, University of Brasilia, UnB (CERME - Centro de Estudos em Regulação de

Mercados, Universidade de Brasília, UnB)

Location: Brasília, DF, Brazil

Links: Centros UnB, CERME, Centros UnB: CERME

SDR

Company: National Secretariat for Regional Development, Ministry of Integration and Regional Development (SDR -

Secretaria Nacional de Desenvolvimento Regional, Ministério da Integração e do Desenvolvimento Regional)

Location: Brasília, DF, Brazil

Links: SDR

UnB

Company: University of Brasília (UnB - Universidade de Brasília)

Location: Brasília, DF, Brazil

Links: UnB