Bruno Santos

Lead Software Engineer | Backend Specialist | Technical Leader

bruno@basantos.com.br GitHub LinkedIn basantos.com.br Brazil

Professional Summary

Seasoned software engineer with 18+ years of experience designing, building, and scaling backend systems for high-impact products. I combine deep technical expertise in Elixir, Ruby, and distributed architectures with a leadership style rooted in trust, clarity, and shared ownership.

I thrive at the intersection of craftsmanship, mentorship, and measurable results—delivering systems that perform, teams that grow, and solutions that make a difference. Driven by curiosity, collaboration, and the belief that the best software is built by empowered teams.

Skills

Languages & Frameworks
Elixir, Phoenix, LiveView, Ruby, Ruby on Rails, TypeScript, React, GraphQL

Databases & Data Stores
PostgreSQL, MySQL, Redis, Elasticsearch, Neo4j

DevOps & Infrastructure
Docker, Kubernetes, AWS, Google Cloud Platform (GCP), Terraform

Messaging & Queueing
RabbitMQ

Practices & Methodologies
TDD, CI/CD, Scrum, Kanban, Pair Programming

Other
API design, Microservices architecture, Distributed systems, Performance optimization

Professional Experience

Senior Software Engineer - Calmwave

Nov 2025 - Current

- Led a read-model migration from Commanded projections to in-memory GenServers for latency-critical paths, reducing read times while simplifying query-side architecture.
- Led patient identity migration from surrogate IDs to synthetic IDs, designing matching logic across HL7 identifiers and demographics to unify records from heterogeneous systems.
- Drove BI modernization by replacing Snowflake-based reporting with an internal Phoenix LiveView dashboard, improving data access speed and reducing analytical handoff overhead.

- Led team-wide AI adoption by defining engineering standards, guardrails, and safe workflows
- Partnered with data science to build Python modules and robust Elixir/Python interfaces for the Algorithm Engine.

Lead Software Engineer - Shopnomix Jul 2024 - Oct 2025

- Architected a high-performance ad bidding platform using Elixir and Phoenix LiveView, supporting real-time tracking and optimization for thousands of concurrent bids.
- Designed PostgreSQL data models that improved query efficiency by **40%**, enabling faster and more accurate ad placement decisions.
- Led a company-wide adoption of TDD, reducing production defects by **35%** and shortening deployment cycles.
- Mentored engineers, fostering a culture of quality, open communication, and continuous learning.

Senior Software Engineer - Allovue, Inc. Mar 2022 - Aug 2024

- Spearheaded the development of a state-funded educational finance portal, enabling transparency and efficiency in public school budgeting.
- Modernized and expanded the core of existing school finance products, improving performance and scalability for thousands of end-users.
- Championed Elixir/Phoenix adoption to enhance maintainability and speed of feature delivery.
- Collaborated closely with product and design teams to align technical direction with user needs.

Senior Software Engineer - Remote Technology, Inc. Aug 2021 - Mar 2022

- Built custom HR platform integrations with robust bidirectional data synchronization via APIs and webhooks.
- Improved system reliability and reduced integration errors through proactive monitoring and automated testing.
- Enhanced developer experience by refining CI/CD workflows.

Senior Software Engineer - Foxbox Digital Jun 2020 - Jul 2021

- Designed and delivered ecommerce solutions integrating Elixir/Phoenix, Ruby on Rails, React, and ElasticSearch with platforms like Shopify and Salesforce.
- Developed ecommerce analytics systems integrating BigQuery, Google Sheets, and multiple data pipelines.

- Contributed to architecture decisions across multiple projects, ensuring scalability and maintainability.
- Interviewed backend candidates and mentored team members.

Time off to recharge and focus Jan 2020 - May 2020

Senior Software Engineer - XING GmbH & Co. KG Oct 2018 - Dec 2019

- Delivered new features for Ruby on Rails applications while guiding Elixir adoption for greenfield projects.
- Designed APIs in close collaboration with frontend teams, improving API usability and consistency.
- Worked within cross-functional teams to deliver value using Scrum and Kanban.

Backend Team Lead - Wunder Carpool Feb 2017 - Sep 2018

- Managed a team of backend engineers, conducting 1:1s, mentoring, and guiding technical decisions.
- Planned and shipped features with a focus on scalability and maintainability.
- Migrated portions of the system to a graph database, improving data modeling capabilities.
- Managed and mentored a team of 7 engineers, improving team productivity through effective coaching and process optimizations.
- Led migration of a legacy Ruby API to Elixir microservices, reducing system downtime by 40% and improving API response times by 70%.
- Directed migration of key data services to Neo4j, enhancing query performance by 50% and significantly simplifying data structures.
- Streamlined feature planning and execution processes, reducing feature delivery timelines by 20%.
- Collaborated closely with mobile and frontend teams to enhance integration processes, decreasing integration errors by over 30%.

Senior Software Engineer - TIDY Homekeeping Mar 2016 - Jan 2017

- Worked on the backend building an API using Ruby on Rails, PostgreSQL, Redis, Sidekiq and Docker, which supported multiple web and mobile applications
- Built a small PoC using Elixir and Phoenix

Software Engineer - Quimbik, Inc. Aug 2012 - Feb 2016

- Developed several websites using Ruby on Rails, MySQL and Javascript
- Built REST APIs with Ruby on Rails that were consumed by mobile apps

- Helped in projects with other technologies such as Objective-C, Groovy/Grails, and Java

Earlier Experience

- Senior PHP Developer - FPP EDU-Media, Inc. (2010 - 2012)
- Web Developer - WAD Soluções para Internet (2008 - 2010)
- Delphi Developer - BWN Aplicativos (2007 - 2008)