# GABRIEL SOARES DA SILVA

MID-LEVEL BACKEND DEVELOPER | RUBY ON RAILS | AI INTEGRATIONS

gabrielsods@live.com | linkedin.com/in/gabrielsods

## PROFESSIONAL SUMMARY

Results-oriented Backend Developer with extensive experience in architecting scalable backend solutions, optimizing database performance, and integrating cutting-edge AI technologies (Model Context Protocol, OpenAI API) into production applications. Proven track record in modernizing legacy Ruby on Rails systems, designing robust data pipelines, and implementing high-coverage test suites in fast-paced international environments.

## PROFESSIONAL EXPERIENCE

**Mid-level Backend Developer | 100Starlings | UK (Remote)** / *March 2025 – Present*

Backend Engineer driving the architectural modernization and ongoing development of a high-volume UK logistics platform, focusing on performance, scalability, and system reliability.

- Architect and deploy autonomous AI agents and complex integrations using the Model Context Protocol (MCP) within a Ruby on Rails ecosystem.
- Engineered an automated AI-driven QA testing framework, significantly accelerating testing cycles and boosting application reliability.
- Spearhead legacy codebase refactoring and service modernization, aligning core systems with high-throughput cloud infrastructure standards.
- Optimize complex database queries and eliminate N+1 query bottlenecks, driving substantial latency reductions across key user flows.
- Overhauled notification pipelines (push, email, SMS) during a major rebranding initiative to support scalable multi-channel engagement.
- Design, execute, and optimize GraphQL queries alongside RESTful API integrations for seamless front-end and service communication.

**Technologies:** Ruby, Ruby on Rails, GraphQL, Sidekiq, RSpec, Capybara, AI Agents, Model Context Protocol (MCP), CI/CD

**Mid-level Backend Developer | 100Starlings | UK (Remote)** / *September 2024 – March 2025*

Architected and delivered an enterprise AI web chat solution for an EdTech enterprise, integrating OpenAI models to automate workspace, skill, and role configuration across complex user contexts.

- Built stateful AI conversational assistants to streamline workspace configuration, improving customer onboarding efficiency.
- Engineered advanced prompt strategies and fine-tuning pipelines to ensure accurate, domain-specific AI model outputs.
- Integrated OpenAI API features seamlessly into Rails backend workflows using asynchronous task queues.
- Implemented high-throughput Sidekiq background jobs to handle background skill categorization and asynchronous content processing.

**Technologies:** Ruby 3.1.4, Rails 7.2, React, OpenAI, Sidekiq, CI/CD, Minitest

**Mid-level Data Engineer | 100Starlings | UK (Remote)** / *April 2024 – September 2024*

Designed and deployed a near-real-time Change Data Capture (CDC) pipeline replacing AWS Glue/Lambda infrastructure, reducing cloud operational expenditure while enhancing data ingestion performance.

- Engineered scalable CDC streaming solutions utilizing AWS DMS and Amazon Redshift for automated analytical reporting.
- Authored modular Infrastructure as Code (IaC) via Terraform to automate cloud provisioning and deployment pipelines.
- Orchestrated complex data workflows with Apache Airflow and established continuous integration/deployment (CI/CD) pipelines.

**Technologies:** Python, Apache Airflow, PySpark, AWS Lambda, AWS Glue, Terraform, Amazon Redshift, SQL, DevOps

**Junior Ruby on Rails Backend Developer | 100Starlings | UK (Remote)** / *December 2023 – April 2024*

Contributed to open-source and internal ecosystem gems, improving gem architecture, deployment, automated testing workflows, and application hosting on Heroku.

- Developed core features for the Rubyblok gem and maintained associated website infrastructure.
- Authored robust RSpec test suites to guarantee code stability across continuous deployment pipelines.

**Technologies:** Ruby 3.2.1, Rails 7.1.2.3, RSpec, Heroku, CI/CD

**Junior Ruby on Rails Backend Developer | 100Starlings | UK (Remote)** / *April 2023 – December 2023*

Maintained software quality and stability for a major UK delivery platform through test suite refactoring, bug investigation, and dependency modernizations.

- Identified and resolved non-deterministic (flaky) tests, optimizing CI build speeds and execution reliability.
- Expanded RSpec test coverage across critical application flows to prevent regression issues.
- Investigated production incidents, diagnosed root causes, and resolved critical backend issues under SLA constraints.

**Technologies:** Ruby 3.2.1, Rails 7.1.2.3, RSpec

## EARLIER EXPERIENCE

**Customer Data Specialist | Senff | Brazil (Hybrid)** / *August 2021 – March 2023*
Developed Business Intelligence tools and data pipelines, contributing to customer service quality decisions. Automated recurring reporting and manual processes through an Apache Airflow-based pipeline.

- Developed and maintained reporting and Business Intelligence solutions.
- Built data pipelines and automated recurring reports and manual tasks.
- Used data analysis to support customer service quality and operational decisions.

**Technologies:** Microsoft Power BI, Python 2.7, Apache Airflow 2.8, pytest, boto3, SQL, Excel

## TECHNICAL SKILLS

**Languages & Frameworks:** Ruby, Ruby on Rails, Python, GraphQL, SQL, PostgreSQL, MySQL, PySpark, React, RSpec, Capybara, RuboCop

**AI & Data Engineering:** Model Context Protocol (MCP), AI Agents, OpenAI API, Prompt Engineering, Apache Airflow, AWS DMS, Amazon Redshift

**Cloud & DevOps:** AWS (Lambda, Glue, S3), Terraform, CI/CD (CircleCI, SemaphoreCI), Docker, Heroku, Git, Sidekiq

**Methodologies & Architecture:** TDD, SOLID Principles, System Architecture, Code Refactoring, Database Optimization

## EDUCATION

**Systems Analysis and Software Development | Universidade Positivo | Brazil** / *October 2023 – Present*
Undergraduate studies in progress.

**Economic Sciences | Universidade Federal do Paraná | Brazil** / *February 2018 – December 2022*
Studies on hiatus.

## LANGUAGES

Portuguese: Native | English: Advanced