Bruno Tatsuya

brunomasunaga@gmail.com | brunotatsuya.dev | github.com/brunotatsuya

Skills

Programming/Frameworks: Python, Flask, Django, FastAPI, Ruby, Ruby on Rails, TypeScript, Javascript, React
Technologies: AWS (RDS, SQS, EKS, EC2, S3, IAM), Terraform, Docker, Kubernetes, Nginx, Redis, SQL, SQLAlchemy
MongoDB, ElasticSearch, CI/CD, Git, GitHub Actions, Grafana, SCSS

Experience

Senior Software Engineer, Imaginary Cloud – Coimbra, Portugal   Jan 2024 – Present
- Improved several Ruby on Rails (similar to Django) REST endpoints performance by 10x by transferring action side effects, such as sending external notifications and generating reports, to be processed in the background using Sidekiq
- Reduced burst balance usage of AWS RDS instances by 80% by refactoring extract, transform and load (ETL) Ruby applications, implementing batch transactions and replacing ROM with Sequel ORM (similar to SQLAlchemy)
- Built AWS SQS queue consumers and RPC-based web services using Ruby, that integrate with OpenAI API, enabling the development of generative AI features through specialized prompts
- Designed and deployed the infrastructure for the generative AI features, managing the Dockerized Ruby applications in a Kubernetes cluster hosted in AWS EKS, using Terraform as IaC tool

Software Engineer, Imaginary Cloud – Coimbra, Portugal   Oct 2022 – Dec 2023
- Reduced searching text features loading time by 60% by implementing data replication strategies on ElasticSearch indexes and integrating its services on a Ruby on Rails app that served a React front-end
- Integrated the Ruby on Rails app with Zendesk, implementing caching strategies with Redis that reduced the impact of Zendesk's data polling routines by 50%, allowing end users to receive data directly on the third-party's platform
- Designed software architecture solutions and technical proposals for potential clients based in the US, UK, India, Portugal and others around the globe, helping increasing the monthly bids won for the company
- Increased the speed of data loading in a React with Typescript app in 10x by using Redux-Saga to run parallel HTTP requests, allied with the implementation of skeleton screens driven by Redux state management, enhancing UX

Software Engineer, Itaú Unibanco – São Paulo, Brazil   Apr 2021 – Aug 2022
- Led a team of 5 engineers to build a low-code platform composed by Python back-end workers and a Flask full-stack web application serving a JavaScript front-end, that allowed non-technical users to automate their own manual tasks
- Increased the speed of ETL Python routines built with SQLAlchemy by 16x by implementing multi-threading and asynchronous communication with external services, which allowed the system to handle over 1000 daily processes
- Eliminated 100% of issues with concurrent development in the same codebase by migrating projects from old code versioning systems to Git, implementing CI and CD with GitHub Actions workflows to run tests, build and deploy

Junior Software Engineer, Itaú Unibanco – São Paulo, Brazil   Feb 2020 – Mar 2021
- Automated back-office processes by developing robotic process automation (RPA) applications using Python and Selenium, which reduced business processing time by 90% and cut the headcount spent with robotic tasks by half
- Reduced database connection overload incidents by 20% by developing a generic API with Flask and load balancing with Nginx to handle SQL queries requests from over 40 low-code applications
- Designed solutions for over 15 potential projects, acting as a software architect to team partners and project managers, which raised the approval rate of the proposals from 20% to 80%

Project Management Intern, Itaú Unibanco – São Paulo, Brazil   May 2019 – Jan 2020
- Managed a team of 4 engineers to address issues in more than 200 RPA applications, which improved incident management by reducing the mean time to repair (MTTR) by 25%

Education

BS in Computer Science, Universidade Federal do ABC – Santo André, Brazil   Dec 2022
BS in Science & Technology, Universidade Federal do ABC – Santo André, Brazil   Dec 2021