

Daniel Martins

Software Engineer * Open Source Enthusiast * Guitarist

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OBJECTIVE AND QUALIFICATION SUMMARY

- Software engineer focused on backend systems, cluster management, operating systems, infrastructure, and related areas
- Solid experience in writing, deploying, and maintaining cloud-native applications
- Passionate about real-world high scalability problem solving

TECHNICAL SKILLS

- **Languages:** Go, JavaScript, Bash, Ruby, Python, Lua, Java, Clojure, Matlab, C
- **Web Frameworks:** Rails, Sinatra, Express.js, Django
- **Web Servers:** Nginx, Unicorn, Puma
- **Infrastructure:** Puppet, Capistrano, Fabric
- **Monitoring:** Grafana, Graphite, InfluxDB, Prometheus/AlertManager
- **Container Technology:** Kubernetes, Tsuru, Docker, Rkt, Container Linux
- **IaaS/PaaS:** AWS, DigitalOcean, Heroku
- **Databases:** MongoDB, Redis, Postgres, Cassandra, MySQL

RECENT OPEN SOURCE CONTRIBUTIONS

- 📦 **kubernetes/kubernetes:** Production-Grade Container Scheduling and Management
 - PR #48707: Allow nodes to create evictions for its own pods in NodeRestriction admission controller
- 📦 **kubernetes-incubator/kube-aws:** Kubernetes on AWS with Container Linux
 - I'm part of the core team and active contributor, with several merged contributions
- 📦 **kubernetes/charts:** Curated applications for Kubernetes
 - PRs #533 and #535 for Prometheus

OPEN SOURCE PROJECTS SUMMARY

- 📦 **danielm/pybreaker:** Circuit Breaker implementation for Python
 - Typically used in API clients in order to prevent cascading failures across multiple systems
 - Used by Globo.com, AppNeta, Amplify, SeatGeek, and others
 - Used to safeguard one of Globo.com's the most accessed internal APIs, with tens of thousands of requests/minute
- 📦 **xmlrunner/unittest-xml-reporting:** Test results exporter for Python
 - XML file format supported by all major CI servers and build systems
 - Used by Khan Academy, Globo.com, and others
- 📦 **danielm/bencode:** BitTorrent encoding implementation in Clojure
 - Parses bencoded strings directly to Clojure data structures and vice-versa
 - Features a threadpool-based parallel piece hashing implementation that can handle tens of GiB of data

PROFESSIONAL EXPERIENCE

Jun. 2015 - Present **Software Engineer**, *Descomplica*, Rio de Janeiro/RJ.

- Migrated all critical services from AWS Beanstalk to Kubernetes, significantly cutting infrastructure costs due to better resource utilization
- Implemented a generic Continuous Delivery pipeline on top of Helm, Jenkins, and AWS Lambda that enables a small development team to push several changes to production every day
- **Technologies got to work on:** Go, JavaScript, Kubernetes, AWS, Nginx, and many others

- Dec. 2010 - **Software Engineer**, *Globo.com*, Rio de Janeiro/RJ.
- May 2015
- Worked on the Live Video Streaming Platform, a distributed architecture for live video ingest and delivery capable of broadcasting dozens of live streams to hundreds of thousands of users
 - Delivered Globosat Play, a software platform that provides cable TV subscribers access to the video content licensed in Brazil by Globosat
 - Delivered Combate Play, a website where Combate channel subscribers enjoy instant and unlimited access to a constantly updated collection of fights
 - Worked on 2012's Big Brother Brasil broadcasting page, which would then become a platform for publishing live video transmission pages (used in several occasions ever since, like the UFC fight nights, Sochi Olympics, etc)
 - Worked on globo.tv, a video-on-demand portal that organizes both free-to-watch and paid content produced by Globo
 - Worked on the current version of the Video Catalog, which consists of a CMS and a pluggable application for offering video-on-demand content
 - Delivered the first version of VideoThumbs, an API that serves dynamically resized and cropped video thumbnails
 - **Technologies got to work on:** Ruby, Python, Lua, Redis, MongoDB, Cassandra, Nginx, and many others
- Jan. 2008 - **Consultant**, *Freelancer*, Ourinhos/SP.
- Dec. 2010
- Worked as an instructor for a SCJP 1.5 course to a class of a dozen students for local development shop
 - Delivered custom CRM system for a local real estate company that organized all brokers' activities, prospects, and kept track of sales goals
 - Delivered a basic multilingual e-commerce website for a local real estate company
 - Wrote a web-based user permission management tool for a client's legacy database, which were already being used by several internal applications
 - **Technologies got to work on:** Java, Python, Oracle, MySQL
- Sep. 2006 - **Programmer**, *Lecom*, Bauru/SP.
- Dec. 2006
- Eliminated severe performance bottlenecks on one of their most critical product
 - Wrote a few small Java applications for data exchange and data synchronization
 - **Technologies got to work on:** Java, ASP, Informix, MySQL
- Jun. 2004 - **Programmer**, *Plasútil*, Bauru/SP.
- Sep. 2006
- Developed a new Warehouse Management System to replace the old Dataflex-based legacy system
 - Wrote the first version of their Intranet application during my internship
 - **Technologies got to work on:** PHP, .Net (C#, WinForms), Oracle

EDUCATION

- 2003 - 2006 **Bachelor, Computer Information Systems**, *Faculdade Gennari & Peartree (FGP)*.
- 2000 - 2002 **Technical School, Computer Programming**, *Liceu Noroeste*.

COURSES AND CERTIFICATIONS

- Mar. 2017 **LFS258: Kubernetes Fundamentals**, *Linux Foundation*.
- Dec. 2013 **CS1156X: Learning From Data**, *CaltechX*.
- Dec. 2011 **Intro to Machine Learning**, *Coursera*.
- Feb. 2007 **SCWCP: Sun Certified Web Component Developer 1.4**, *Prometric*.
- Aug. 2006 **SCJP: Sun Certified Java Programmer 1.4**, *Prometric*.

FEATURED ARTICLES

- Sep. 2017 **Pain(less) NGINX ingress**, *Personal Website*.
Post reached #6 in HackerNews
- Sep. 2016 **Five Months of Kubernetes**, *Personal Website*.
Post reached #4 in HackerNews

CONFERENCES

- Nov. 2016 **KubeCon**, Seattle/WA, USA.
- Sep. 2014 **Strange Loop**, St Louis/MO, USA.
- Feb. 2013 **Strata**, Santa Clara/CA, USA.
- Jun. 2012 **Velocity**, Santa Clara/CA, USA.

