

Artur Baruchi

SOFTWARE ENGINEER · SITE RELIABILITY ENGINEER

Sydney, NSW, Australia

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Summary

Multi-talented Software Engineer offering 15+ years of experience in demanding environments focused on producing and maintenance of cutting-edge systems for Tech Industry. Skilled in directing development with a creative and performance-oriented approach. Well-organized and customer-focused with proven skills in project management, team leadership and software engineering.

Education

University of São Paulo (USP)

PH.D IN COMPUTER SCIENCE

- Amazon Research Grant.
- ACM Operating System Review Scholarship Grant.

São Paulo, Brazil

Jan. 2010 - May. 2015

University of São Paulo (USP)

M.D IN COMPUTER SCIENCE

São Paulo, Brazil

Jan. 2007 - Oct. 2010

São Judas Tadeu University

B.S. IN COMPUTER SCIENCE

São Paulo, Brazil

Jan. 2001 - Dec. 2004

Work Experience

Heo

SENIOR SOFTWARE ENGINEER

- Development of main product in Python and Django.
- Implementation of mechanisms to increase Observability and Availability of internal and external systems.
- Architectural Design of Web Applications running in AWS.
- Reduced number of Bugs by at least 50% by Implementing unit tests and proper pipeline.
- Architectural modernization of internal tools and services.
- Internal workshops to share good practices (i.e. clean code, refactoring, tests, git.)

Sydney, Australia

May 2023 - Present

Goldman Sachs

SENIOR SITE RELIABILITY ENGINEER (EXECUTIVE DIRECTOR) - ENGINEERING DIVISION

- Software development for a monitoring repository of the services in the firm.
- User Interface (UI) designing and backend development for a notification catalogue service, central to an outage reporting system.
- User Interface (UI) designing and backend development for a Post-mortem follow-up system.
- Testing large codebases and regular deployments of updates to the software.
- Generating and maintaining dashboards for the analytics of internal software systems.

Sydney, Australia

Oct 2021 - May 2023

LexisNexis

SENIOR CONSULTING SOFTWARE ENGINEER

- Developed Data Models to store data from different vendors. This data model is used by several teams inside the company.
- Refactored unit tests framework for the Big Data platform allowing the developer team to add different data layouts.
- Implemented mechanisms to identify implicit data removal, improving storage efficiency by, at least, 10%.
- Performed researches to move Big Data platform to cloud - particularly Roxie cluster, responsible to handle queries.

Barueri, Brazil

Mar. 2021 - Sep. 2021

CONSULTING SOFTWARE ENGINEER

- Developed and Shipped high performance queries (sub-second) using ECL Language and HPCC Platform (Big Data) for a new Brazilian Credit Bureau project, which an initial load of 2000 Requests per Hour.
- Delivered project milestones before contractually agreed.
- Designed the System and Data Model for a Big Data project which an expected load of 30-60 Requests per Second and storage of 700TB.
- Managed two research projects with a local university (one project related to HPCC Cache and another related to HPCC running in public cloud using Kubernetes).
- Recognised as a Team Player by peers and managers.
- Presented lectures and workshops about HPCC and High Scalable Systems in local events such as ERAD-SP, SECCON, SENG and international events such as HPCC Summit 2020 with an audience of 200 students and professionals.

Mar. 2019 - Mar. 2021

NIC.br

São Paulo, Brazil

SENIOR SOFTWARE DEVELOPER & TECHNICAL LEADER

May 2017 - Mar. 2019

- Led a team composed by 5 developers.
- Designed and developed an asset control system with Docker, Django Framework and PostgreSQL, which helped internal support teams (30+ users) to have a clear view of the resources usage.
- Applied Agile routine to the development process, which allowed us to deliver features and solve problems 2x faster.
- Applied Test Driven Development (TDD), covering about 70% of the code. TDD reduced bugs occurrences drastically (around 40%), helping the team to focus on improving the system and create new features.
- Designed and developed a payment system to replace the legacy one. Increased the queries response time from 2 seconds to 500ms by using Pony ORM Framework and modern design patterns as sidecar using Docker and Flask.
- Discussed project progress with customers, collected feedback on different stages and directly addressed concerns.

São Paulo State University (Unesp)

São Paulo, Brazil

POSTDOCTORAL RESEARCHER

Jun. 2015 - Nov. 2018

- Performed high technical research in cloud computing environment in partnership with Huawei open cloud.
- Combine and create resources in 3 different cloud providers.
- Developed and Run HPC workload simulations in a cloud environment in which I identified a major bottleneck in Network communication for "Elephant Flows".
- Reduced network load by 45% in simulations.
- Performed kernel tuning in Linux servers for Big Data Transfer between Brazil and US during Super Computer Conference demonstration. During these demonstration a new record was established (85 Gbps).
- Contributed for an Open Source project (kytos.io). Kytos is a SDN controller project, developed in Python and capable to handle different versions of OpenFlow protocol.

Anhembi Morumbi University

São Paulo, Brazil

PROFESSOR

Jun. 2015 - Jun. 2017

- Responsible to keep the content and teach Computer Organization and Architecture and Computer Network.
- Probed, encouraged and facilitated class discussions by building discussions into lessons, asking open-ended questions and using techniques to track student participation and actively solicit input.
- Shifted between informal and formal methods of teaching to create multi-layered web of learning, incorporating experiments, practical activities, discussions and projects into lessons.

Hewlett-Packard

São Bernardo do Campo, Brazil

R&D - SOFTWARE ENGINEER & SPECIALIST TECHNICAL CONSULTING

Jun. 2011 - Jun. 2015

- Development of tools to use in "The Machine" project, which aims to develop a Memory-Driven computer architecture.
- Responsible for changing and adapting map reduce tools to work with this new computer architecture.
- Created a tool to generate random or specific datasets which considerably reduced the time to run simulations.
- Created virtual environments to replicate and validate research results reducing the time spent in operational tasks.
- Optimized system performance parameters in Linux Kernel configuration, increasing IO Throughput and decreasing CPU usage.
- Performed storage and database migrations with no downtime.
- Deployed environments running Red Hat Cluster and HP Service Guard HA Cluster (some deployments with up to 5 nodes).
- Reduced the tickets backlog by 70% after creating standardized Syslog configurations which eliminated false-positive messages.
- Created automated routines for Linux Patching which reduced human errors and by 80% calls outside the business hour.

IBM

São Paulo, Brazil

STAFF SOFTWARE ENGINEER

Jul. 2009 - Jun. 2011

- Create and run test routines for different environments (AIX, Linux and Windows).
- Conducted regression tests for new features of DB2 (IBM Database). While working in Temporal tables feature founded several critical bugs.
- Created hundred of tests scenarios to evaluate corner and edge cases.
- Created scripts in different languages (Perl, Bash and Python) for tests automation, which reduced up to 70% of the setup time in complex scenarios.
- Created documentations for DB2 Development team which was used by different teams distributed around the world.

Hewlett-Packard

São Bernardo do Campo, Brazil

SENIOR SYSTEM ADMINISTRATOR

Aug. 2007 - Jul. 2009

- Diagnosed and executed resolution for all network and server issues.
- Maintained flexible schedule and responded to after-hours and weekend emergencies.
- Increased customer satisfaction by resolving OS and Network issues.

Awards & Certifications

INTERNATIONAL AWARDS

2019 **Finalist**, HPCC Summit Raspberry-Pi Contest

Atlanta, USA

DOMESTIC AWARDS

2011 **1st Place**, IBM Patent Olympics

Sao Paulo, Brazil

CERTIFICATIONS

2020 **Microsoft**, AZ-900, Microsoft Azure Fundamentals

2021 **Microsoft**, AZ-204, Microsoft Azure Developer Associate

2023 **AWS**, CLF-C02, Cloud Practitioner

Presentations

Python Australia 2024

Melbourne, Australia

PRESENTER FOR SPACE <DJANGO: MIGRATING AND REDESIGNING A DATABASE WHILE HUNTING FOR SATELLITES>

Nov. 2024

- Introduced how Django ORM was used to migrate a complex database schema to improve scalability and creation of new features.
- Concepts of Database, ORM and Object Oriented Programming.

Python Brasil 2020

São Paulo, Brazil

PRESENTER FOR <PROBABILISTIC DATA STRUCTURES>

Nov. 2020

- Introduced concepts of Probabilistic Data Structures.
- Presented most common Probabilistic Data Structures, such as Bloom Filters, HyperLogLog and Count-min sketch.

HPCCSummit Community Day

São Paulo, Brazil

PRESENTER FOR <MASTERING THE RELATIONAL, ROXIE AND REGRESSIVE REALMS WITH ECL>

Oct. 2020

- Introduced Concepts of Indexes and Big Data Queries.
- Introduced concepts and architecture of Roxie Cluster.

InfoUnesp - WebInfo

São Paulo, Brazil

PRESENTER FOR <DOCKER FOR DEVELOPERS>

Oct. 2020

- Introduced Concepts of Containers and Docker.
- Provided configurations examples and commands to be used in a development environment.