

Joaquin Casares

STAFF/PRINCIPAL PLATFORM ENGINEER AI Infrastructure (LLMOps), Developer Experience & Blockchain Leader

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SUMMARY OF QUALIFICATIONS Principal-level engineer with 15+ years of experience building and rescuing high-performance distributed systems that drive reliability, velocity, and productivity across organizations. Proven track record of architecting systems serving millions of users, shaping technical roadmaps, and mentoring engineering teams to deliver innovation at scale.

KEY ACHIEVEMENTS

- Architect distributed data pipelines, tripling throughput while halving costs for mission-critical analytics.
- Spearhead a developer experience overhaul eliminating a chronic 56% CI/CD failure rate and cutting release times by 70%, enabling rapid, reliable multi-team releases.
- Automate developer onboarding across 7 teams, allowing new engineers to contribute on their first day instead of their second week, saving 3+ engineer-months per year in ramp-up time and laptop provisioning.
- Operate a 119-node blockchain network serving 5M+ users, implementing comprehensive load testing, observability, and monitoring to ensure reliable, scalable growth.
- Author widely-used open-source tools (100K+ downloads) and publish technical guides to share knowledge. Also a frequent speaker at petabyte-scale industry events (Cassandra Summit, DataDay Texas, and Meetups).
- Build internal tools and a knowledge base to support my 200+ enterprise customers (including 15 Fortune 100 companies). These self-service resources are still in use a decade later, providing lasting support and reducing operational overhead.

EXPERTISE & FOCUS Skilled in Python, Kubernetes, Docker, Terraform, AWS, GCP, horizontally scalable systems like Apache Cassandra, and governing Ethereum-powered networks. Open to opportunities working with Golang, Helm, Solidity, Node.js, and Postgres.

Apr 2024 – Jun 2025 (1.2 years) | **SENIOR SOFTWARE ENGINEER @ WEAVERGRID** | **STABILITY & VELOCITY**
Sole Developer Experience Engineer on the 5-person Foundations team stabilizing **CircleCI** / **Kubernetes** releases, improving developer velocity, and mentoring 27 engineers on testing, orchestration, and debugging of **Python** and **Node.js** microservices.

- Revamp 2-week onboarding to 24 minutes with setup automation and database access bundles before first 1:1 with manager.
- Eliminate **CircleCI** failure rate of 56%, reduce test runtimes by 73%, and lower P95 deployment duration from 36 to 11 minutes.
- Reduce **Cypress** tests from 8 to 4 minutes and reduce flakes from ~70/week to 2 every 3 weeks via orchestration and tagging.
- Double daily release cadence by cutting the rate of **CircleCI** integration test interruptions from 33% to 0% by caching seed data.
- Create and automate a cross-service uptime tracking **CircleCI/Cypress** project to alert on reliability gaps across Engineering.
- Independently prioritize critical work for rapid fixes, improving delivery speed and elevating team morale without PM escalation.
- Reduce local **Docker Compose** build times by 70% by optimizing caching and build orchestration to improve developer velocity.

Aug 2023 – Apr 2024 (8 months) | **CONSULTANT @ AXONOPS** | **TECHNICAL EVANGELISM & BENCHMARKING**
Produce and present performance comparisons for monitoring **Apache Cassandra** clusters at AI / Cassandra Summit and co-lead 4 monitoring training sessions. Work directly with the three founders creating marketing collateral and technical documentation while providing product feedback for an observability and operations management console.

Dec 2021 – Nov 2022 (1 year) | SENIOR SOFTWARE ENGINEER @ AUDIUS | AUTOMATION & OBSERVABILITY

Own **CircleCI** automation, release certification, and observability of a 119-node decentralized **blockchain** network powered by 23 third-party operators servicing 283M+ requests and 5M+ monthly active users. Pivot from a backend-focused role into the Infrastructure team to improve deployment orchestration, streamline test environments, and uncover performance bottlenecks.

- Automate staging reservations, production deployments, **Ethereum** governance, and **Audius network** releases using **CircleCI**.
- Introduce **Prometheus** metrics and **Grafana** alerts across Slack, Discord, and PagerDuty for **Python** and **TypeScript** codebases.
- Develop the first load test against staging using **Node.js** to generate **POA Network**-backed entities proportional to production.

Oct 2018 – Dec 2021 (3 years) | SOFTWARE DEVELOPMENT ENGINEER III @ ADOBE | RELIABILITY @ SCALE

Decompose the Magento order management monolith into scalable inventory-centric **Go** microservices. Rapidly rewrite **GitOps** release pipeline, securing stability for Adobe's second Black Friday after acquiring Magento. Monitor and maintain the Magento sourcing engine as customers migrate to the new Adobe Commerce product offering.

- Benchmark with **Gatling** scenarios written in **Scala**, collecting results in **Kibana** and **DataDog**, to stress Black Friday readiness.
- Document **GitOps** infrastructure and maintain **Jenkins X**, **Terraform**, **Flux**, **Helm Operator**, **AWS**, **ELK**, and **EKS** environments.
- Define **LDAP**-restricted **Vault** hierarchies and rotate strong secrets consumed by **Kubernetes** via **Sealed** and **Helm Secrets**.
- Migrate from **DataDog** to **Prometheus/Grafana**, **ElasticSearch/Kibana** to **Splunk**, and implement Adobe compliance requests.

Aug 2016 – Oct 2018 (2 years) | CONSULTANT @ THE LAST PICKLE | CLIENT EMPOWERMENT & RESULTS

Create automated diagnostics and deliver tailored runbooks to restore **Apache Cassandra** clusters with over 800 nodes. Provide follow-the-sun support from EMEA to Australia within a 13-person distributed consultancy aimed at ending engagements quickly through in-depth documentation and multi-month plans customized for future reference and self-help diagnostics.

- Automate actionable reports on **Cassandra**, disk, and **Linux** configurations, logs, and **data model** analysis. Still in use in 2024.
- Develop **Grafana** dashboards and alerts while providing critical support for **Cassandra** latency degradation at T-Mobile.
- Create **Docker**-validated runbooks for **Cassandra** maintenance, preventive care, troubleshooting, and **S3/EBS** backup strategies.

Jul 2015 – Aug 2016 (1 year) | INTERNAL API ENGINEER @ UMBEL | EFFICIENCY & DATA CONSISTENCY

Architect an asynchronous **Python** API using **Apache Cassandra** and **Dynamo** by applying **Microservice Design**, **Event-Driven Design**, **CQRS**, and **Volatility-Based Decomposition** principles to ensure accurate denormalized data. Partner with the Chief Architect and CEO to pivot the ad-tech platform into a data bank while trimming database costs and batch runtimes.

- Increase **Celery** performance by 3x via asynchronization and **Cassandra** features while reducing **Cassandra** cluster size by 50%.
- Design and implement an **asynchronous data object** for denormalization, client retries, metrics, hydration, and transactions.
- Use **Sentry**, **Jira**, **GitLab**, **Docker Compose**, **Python nose**, and **Slack** for alerting, tracking, development, testing, and discussion.
- Kickstart Umbel Labs' innovation through **big data distributed systems**, **blockchain technologies**, and **virtual reality** proposals.

Aug 2014 – Jul 2015 (1 year) | DEMO ENGINEER @ DATASTAX | EXPERIENCE ENGINEERING & TRAINING

Develop enterprise-focused and community-facing demos for **DataStax Enterprise** as the sole Pre-Sales Engineer embedded with Solutions Architects. Distill real-world use cases into live assets for sales calls, certification courses, interactive conference booths, and Marketing initiatives while supporting 23x headcount growth to 440 geo-distributed employees.

- Develop a full-stack demo, training, and certification platform using **Python**, **Flask**, **Jinja2**, **Bootstrap**, **Docker**, **EC2**, and **Azure**.
- Manage project scope, timeline, and deliverables for demos in cross-team efforts between Marketing, Pre-Sales, and Post-Sales.

Dec 2012 – Jul 2014 (1.7 years) | SOFTWARE ENGINEER IN TEST @ DATASTAX | DATA INTEGRITY @ SCALE

Validate linear scaling and data integrity for 1000-node clusters while benchmarking multi-hour performance and multi-day endurance tests. Trim **AWS** costs through instance orchestration and centralized log management. Partner with Marketing, Documentation, Training, and Product teams across various initiatives to further company growth and product adoption.

- Train team of 4 to assume ownership of **Java**, **Python**, and **.NET** client-driver testing using cloud-hosted clusters upon transition.
- Bootstrap **Python nose** and **Java TestNG** test suites for the **DataStax Drivers for Apache Cassandra** using **Jira** and **Jenkins**.
- Validate, test, and teach Automaton, the internal performance and regression tool run on hardware, **EC2**, and **RightScale**.

Jan 2011 – Jan 2013 (2 years) | SUPPORT ENGINEER @ DATASTAX | COMMUNITY, STABILITY & SOLUTIONS

As employee #9, ensure zero-downtime **DataStax Enterprise** clusters (**Apache Cassandra**, **Solr**, **Hadoop**) across **AWS** and on-prem installations for Fortune 100 customers and support IRC, Meetup, and forum community members. Deliver documentation, proof-of-concepts, configuration tuning, data modeling, production AMLs, and developer tooling before escalating to Apache Committers.

- Primary support contact for 9 months across 16+ products and 200+ organizations; train 5 replacements, including manager.
- Create Knowledge Base that is used daily and referenced by newly hired and established Support Engineers as of 2024.
- Contribute to public wikis, design auto-clustering **Amazon Machine Image**, and publish blog posts still driving traffic in 2024.

Aug 2005 – Dec 2010 (5.5 years) | THE UNIVERSITY OF TEXAS AT AUSTIN | INTERDISCIPLINARY TECHNOLOGY

Blend algorithms with Digital Arts while learning, working, and teaching within interdisciplinary media labs. Pursue direct mentorships with a Computer Science professor who optimizes new generations of Intel CPUs and the head of each media lab listed, including a tenured Communications professor who was the sound engineer for The Doors' performance at Woodstock.

- Bachelor of Arts **Computer Science**
- Bachelor of Science **Radio-Television-Film**
- Bridging Disciplines Program **Digital Arts & Media**
- New Media Initiative **Advanced Communication Technologies Laboratory**
- Advanced **Digital Media Institute**