

# Joaquin Casares

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

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**SUMMARY OF QUALIFICATIONS** Principal-level engineer with 14+ 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 Cassandra, and governing Ethereum-powered networks. Open to opportunities working with Golang, Helm, Solidity, Node.js, and Postgres.

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Apr 2024 – Present (*1 year*) | **SENIOR SOFTWARE ENGINEER @ WEAVEGRID** Sole engineer focused on **Developer Experience** in the 5-person **Foundations Team** as a resource for **Infrastructure, Kubernetes**, and **CircleCI** support for 30 Engineers.

- Revamp 2+ day onboarding to 40 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.
- Enable **Redis Cluster** Mode and introduce queued deployment strategies to improve critical ingestion and deployment safety.
- 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** Produce a performance comparisons and present at the AI/Cassandra Summit, co-lead four training sessions on monitoring **Apache Cassandra**, and publish developer blog posts.

Dec 2021 – Nov 2022 (*1 year*) | **SENIOR SOFTWARE ENGINEER @ AUDIUS** Own CI/CD automation, observability, and release certification for a 119-node network (23 third-party operators) servicing 283M+ requests and 5M+ unique users monthly.

- 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 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** Decompose the Magento order management monolith into scalable inventory-specific **Go microservices** and support legacy sourcing and config systems.

- 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** Produce runbooks and resolve client issues for **Apache Cassandra** clusters as large as 800+ nodes. TLP was headquartered in New Zealand with 13 geo-distributed employees.

- 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** Architect an async **Python** API backed by **Apache Cassandra** and **Dynamo** using **Volatility-Based Decomposition**, **Microservice**, **Event-Driven Design**, and **CQRS** principles.

- 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** Use best practices and common use cases to develop enterprise and community facing demos for **DataStax Enterprise**. Witness 23x 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 deliverable 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** Bootstrap **Python**, **Java**, and **C++** client-driver testing harnesses for **Apache Cassandra**. Collaborate with Marketing, Documentation, Training, and Product teams.

- 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** Support **DataStax Enterprise: Apache Hadoop**, **Apache Solr**, and **DataStax Opscenter** on **Apache Cassandra**, in **AWS** and on-prem production environments. Employee #9.

- Primary support contact for 9 months across 16+ products and 200+ organizations; train 5 replacements, including manager.
- Create Knowledge Base that is used daily, as of 2024, and referenced by newly hired and established Support Engineers.
- 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**

- 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**