

Joaquin Casares

Aug 2023 – Present (*4 months*) | **CONSULTANT @ AXONOPS** Produce a performance comparison and present on it at the AI/Cassandra Summit, co-lead four training sessions on monitoring **Apache Cassandra**, and field technical questions at the booth.

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 node operators) servicing 283M+ requests and 5M+ unique users monthly.

- Introduce **Prometheus** metrics with dynamically generated configurations and **Grafana** alerts for Slack, Discord, and PagerDuty.
- Automate staging reservations, production deployments, **Ethereum** contract governance, and **Audius network** releases using **CircleCI**.
- Develop first load test against the staging environment 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 the legacy sourcing and configuration systems.

- Document **GitOps** infrastructure while maintaining multiple **Jenkins X**, **Terraform**, **Flux**, **Helm Operator**, **AWS**, **ELK**, and **EKS** environments.
- Benchmark using **Gatling** scenarios written in **Scala**, collecting results in **Kibana** and **DataDog**, to confirm Black Friday readiness.
- Define **LDAP**-restricted **Vault** hierarchies and rotate high-strength secrets consumed by **Kubernetes** via **Sealed Secrets** and **Helm Secrets**.
- Migrate services 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.

- Develop **Grafana** monitoring dashboards and alerts while providing critical support for **Cassandra** latency degradation at T-Mobile.
- Automate actionable reports focused on **Cassandra**, disk, and **Linux** configurations, logs, and **data model** analysis. Still in use in 2024.
- Deliver **Docker**-validated runbooks for **Cassandra** issue resolution, maintenance and preventative care, **S3** and **EBS** backup strategies.
- Create a **Docker Compose** dashboard development environment with **Grafana**, **Cassandra**, **Reaper**, **Prometheus**, **collectd**, and **ELK**.

Jul 2015 – Aug 2016 (*1 year*) | **INTERNAL API ENGINEER @ UMBEL** Architect an asynchronous **Python** API backed by **Apache Cassandra** and **Dynamo** using **volatility-based decomposition**, **microservice**, **event driven design**, and **CQRS** principles.

- Increase **Celery** performance by 3x through asynchronization and **Cassandra** features while reducing **Cassandra** cluster size by 50%.
- Design and implement an **asynchronous data object** that handles denormalization, client-side retries, metrics, hydration, and transactions.
- Kickstart Umbel Labs innovation initiatives through **big data distributed systems**, **blockchain technologies**, and **virtual reality** proposals.
- Heavily follow **volatility-based decomposition** and borrow from **Microservice**, **Event Driven Design**, **Time Series**, and **CQRS** principles.

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.

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.

Jan 2011 – Jan 2013 (*2 years*) | **SUPPORT ENGINEER @ DATASTAX** Support **DataStax Enterprise: Apache Hadoop**, **Apache Solr**, and **DataStax Opscenter** over **Apache Cassandra**, in on-prem and **AWS**-hosted production environments. Employee #9.

- Develop a full-stack demo, training, and certification platform using **Python**, **Flask**, **Jinja2**, **Bootstrap**, **Docker**, **EC2**, and **Azure**.
- Validate, test, and teach Automaton, the internal performance and regression tool run on hardware, **EC2**, and **RightScale**, written in **Python**.
- Primary support contact for 9 months across 16+ products, 200+ organizations before training 5 replacement hires, manager included.
- Train 7 engineers and 2 managers upon transition from Support and QA departments. Support training material still in use in 2024.
- Create internal knowledge base, contribute to public wikis, design auto-clustering **AMI**, and publish blog posts that drive traffic in 2024.

Jun 2007 – Present (*17 years*) | **OWNER @ LEGAL ANIMATION CONSULTING** Design and produce customized storyboards, models, and animations, using **Blender**, that meet budget and deadline targets for legal proceedings.

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

Bachelor of Arts **Computer Science**

Advanced **Digital Media Institute**

Bachelor of Science **Radio-Television-Film**

Interdisciplinary Study **Digital Arts & Media**

New Media Initiative: **Advanced Communication Technologies Laboratory**