

Joaquin Casares

INTERNAL API ENGINEER @ UMBEL

July 2015 – Present (1 year)
Austin, Texas

Architect and implement an asynchronous **Python** API in front of **Apache Cassandra** and **AWS Dynamo** using **volatility-based decomposition**. Employee #60.

- Implement **Cassandra** best practices and connection pooling across data centers for a production **Django** environment.
- Increase **Celery** performance through **Cassandra**-based optimizations requiring 50% fewer workers at 30% of the original run time.
- Design and implement an **asynchronous data object** that handles denormalization, client-side retries, metrics, hydration, and transactions.
- Heavily follow **volatility-based decomposition** and borrow from **Microservice**, **Event Driven Design**, **Time Series**, and **CQRS** principles.
- Use **Sentry**, **Jira**, **Gitlab**, **Docker Compose**, **Python nose**, and **Slack** for issue alerts, tracking, development, testing, and discussion.
- Kickstart Umbel Labs innovation initiatives through **big data distributed systems**, **blockchain technologies**, and **virtual reality** proposals.

DEMO ENGINEER @ DATASTAX

Aug 2014 – July 2015 (1 year)
Austin, Texas

Use best practices and common use cases to develop enterprise and community facing demos for **DataStax Enterprise**. Witness 23x growth to 440 employees.

- Single-handedly develop **Cornerstone**, a full-stack demo platform using **Vagrant**, **Ubuntu**, **Docker**, **EC2**, **Azure**, and **VirtualBox**.
- Single-handedly seed web applications using **Python**, **Flask**, **Jinja2**, **Bootstrap**, **Google Charts**, and **Metagener**.
- Administer training and grade full-stack final projects for new hires and DataStax Certified Partners utilizing **Cornerstone**.
- Deploy self-contained conference demos with minimal internet reliance in person or through remote instructions.
- Project manage scope, timeline, and deliverables in cross-team efforts between Marketing, Pre-Sales, and Post-Sales.
- 4.5 years working in distributed teams, under remote managers, using **HipChat**, **Git**, and **Jira / Trello**.

SOFTWARE ENGINEER IN TEST @ DATASTAX

Dec 2012 – Jul 2014 (1.5 years)
Austin, Texas

Develop multiple client-driver testing harnesses for **Apache Cassandra**. Collaborate with Marketing, Documentation, Training, and Product teams.

- Bootstrap **Python nose** and **Java TestNG** regression harnesses, tracked by **Jira**, run by **Jenkins**.
- Create multiple demos and tools for testing and release with **DataStax Enterprise**.
- Contribute to **Automaton**, the internal performance and regression tool run on hardware and **EC2**, written in **Python**.
- Validate, test, and teach **RightScale** integration with and without **Automaton** alongside the Test Infrastructure team.
- First dog food project using **Cassandra Python Driver** and **Boto** to allow IT to track **EC2** cost and usage across departments.
- Present a 260-slide presentation in 5 minutes at Cassandra Summit 2013. Produce polished marketing video.
- Member of executive-mandated 3-person internal focus group between Marketing and Engineering.
- Practically enhance a successful OSCON Marketing campaign.
- Train 4 of 5 replacement hires, manager included, and document procedures on transition.

SUPPORT ENGINEER @ DATASTAX

Jan 2011 – Jan 2013 (2 years)
Austin, Texas

Support **DataStax Enterprise**: **Apache Hadoop**, **Apache Solr**, and **DataStax Opscenter** over **Apache Cassandra**, in production. Employee #19.

- Utilize **Zendesk**, **forums**, **IRC**, **mailing lists**, **phone calls**, and **remote sessions** to support production **Linux** environments.
- Primary support contact for 9 months for 16+ products, 6 platforms, 200+ organizations.
- Develop and maintain a collection of Support-oriented **Python** tools, triggers, cron jobs, and widgets.
- Develop internal knowledge base, wiki, and tools utilized across multiple departments.
- Advise production customers and DataStax Documentation team on best practices.
- Single-handedly develop, maintain, test, and support the DataStax **Amazon Machine Image** for 4 years until April 2015.
- Train 5 of 6 replacement hires, manager included, and guide internal and external policy creation on transition.

THE UNIVERSITY OF TEXAS AT AUSTIN

Bachelor of Arts **Computer Science**

New Media Initiative: **ACTLab**

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

Advanced **Digital Media Institute**

Interdisciplinary Study **Digital Arts & Media**