

Jose Santiago

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Portfolio:
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TECHNICAL SKILLS

- **Proficient:** Ruby on Rails, RSpec, HTML, CSS, JavaScript, jQuery, BackboneJS + MarionetteJS, Node.js, REST API Design & Development, MySQL, PostgreSQL, SQLite, Git, AWS, Docker, Kubernetes, Linux System Administration, Bash Shell Scripting, Elasticsearch, Apache HTTP, Nginx, Memcached, Redis, Container-based Pipelines
- **Basic exposure:** React, Redux, Webpack, PHP, Rust, Golang, Hazelcast, CRAN R Lang

WORK EXPERIENCE

Persado, Inc | Director of Engineering, Enterprise Architecture | New York, NY

Jul 2019 – Present

- Rejoined the organization to create the new Site Reliability Engineering team and drive the Kubernetes adoption initiative in partnership with our DevOps team.
- Implemented a database subsetter and data scrubber to allow engineers to move away from working against local copies of production databases and towards using sanitized data subsets from production. This was key to allowing the organization to achieve ISO 27001 certification.
- Successfully migrated all applications in the core Enterprise platform from a traditional highly-available server infrastructure on Amazon EC2 servers to Kubernetes on Amazon EKS.
- Executed a multi-cloud adoption strategy to support isolated application instances running across AWS Elastic Kubernetes Services and Microsoft Azure Kubernetes Services, for customers that contractually ban AWS usage when providing services to their end users.
- Rebuilt Gitlab CI pipelines to support Kubernetes deployments for continuous delivery and for parallel test executions, reducing the execution time of our largest test suite from 75 mins to 12 mins.
- Implemented the ability for developers to deploy lightweight, ephemeral sandbox environments with fully functional versions of the core Persado Enterprise Platform via Kubernetes, in order to share features under active development for Product review and collaboration with other external teams.
- Introduced basic distributed request tracing across all microservices using the Elastic Stack and UUIDs as trace IDs, to allow engineers to trace the flow of a single request across systems for debugging and analysis.
- Centralized all logging from the Kubernetes cluster via the Elastic stack to allow easy viewing and filtering of log output.
- Provided engineers with monitoring dashboards via Prometheus and Grafana to analyze resource consumption, response time, errors, load balancer connections, and other metrics in near real time. Configured alerts via Grafana to notify team members via slack and email when metrics are beyond healthy limits.

Negotiatus, Inc | Director of Engineering | New York, NY

Oct 2018 – Jul 2019

- Reported directly to the CTO and Co-founder. Grew the team from 5 engineers to 12 in NYC and a team of 3 in South America.
- Established best practices for code reviews, development cycles, and a hybrid of Scrum and Kanban methodologies known as ScrumBan.
- Successfully migrated all infrastructure off of Heroku to AWS ECS over 4 months, reducing monthly hosting invoices by nearly 50%
- Collaborated closely with the Product team to provide technical assessments of major new features and discuss related architectural requirements with the engineers.

- Created an environment that encouraged developers to collaborate and share their ideas for new technologies, processes, refactorings, and products via Request for Comments (RFC) documents that were open to the full engineering team to discuss, debate, and agree prior to deciding adoption/implementation.
- Mentored each of our engineers with monthly 1:1s, helping them to better define personal goals, establish action plans related to these goals, and OKR progress.
- Advised senior engineers to help them to identify whether they wanted to progress as individual contributors or as managers and guided them accordingly.
- Dedicated 30% of my time to working alongside engineers on new features and bug fixes to maintain proximity and understanding of the existing codebase.
- Led the integration of our central purchasing platform with over 20 external vendor systems, using various procurement systems and standards, such as cXML.

Persado, Inc | Director of Engineering, Enterprise Development | New York, NY

Jan 2016 – Oct 2018

- Directly responsible for the leadership of development, sprint planning, deployment, and DevOps requirements for the core applications of Persado's Enterprise artificial intelligence services.
- Interface with QA, Data Science, IT, Operations, and Product teams on a daily basis to manage expectations, clarify user stories, troubleshoot bugs, enhance our infrastructure, and plan future development cycles based on the Product Roadmap.
- Successfully deliver a steady cycle of 6 releases per product, per year, while ensuring the 3 product teams work at a steady, comfortable pace with a healthy work-life balance.
- Play a key role in the rebuilding and expanding of the Enterprise development team, having directly hired 22 engineers, handling every step of the process from the initial screening calls to salary negotiations.
- Handle team member performance reviews, financial negotiations, team restructuring, workflow refinements, and continued learning with a bi-monthly session called #brewinstallknowledge.
- Managed and launched the first Enterprise Client Dashboard from Persado, allowing clients to review their campaign results, emotional insights, content trends over time, and collaborate with the Persado team. This product directly impacted the closing of over \$20 million worth of contracts.
- Managed and launched an Enterprise Client Real-Time Content Serving API, which is capable of serving 12,000 sustained requests per second, per server.
- Drove the adoption of a container-centric workflow and CI pipeline using Docker and Kubernetes.
- Always take time to write code with my team, reviewing merge requests, enhancing our test suite, fixing bugs, and architecting solutions, in every product release.

Persado, Inc | Senior Software Engineer | New York, NY

Dec 2014 – Dec 2015

- Team lead for the development and maintenance of our core natural language processing application used to service all of our clients, using a combination of Ruby on Rails 4.x and BackboneJS.
- Took the initiative to adopt the responsibilities of a then-empty Product Manager role, quickly establishing a relationship with executives, senior managers, and end users. Gathered business requirements, planned product releases, handled end user support, and delivered weekly status updates to upper management, while also planning development sprints, tackling technical debt, recruiting new engineers, and consistently delivering product releases on time.

IMP Digital Studios | Lead Interactive Developer and IT Manager | Paramus, NJ

Aug 2012 – Nov 2014

- Developed an iOS application with a Rails back-end utilized by pharmaceutical companies for tradeshow kiosks, lead collection, general meetings, and internal database access with offline capability.
- Created a web-based meeting management application where a client could allow their meeting attendees exclusive access to a remotely managed iOS application that provides daily agendas, venue information, speaker bios, speaker presentation materials, note-taking, notifications, and augmented reality experiences
- Revitalized the IT infrastructure by installing a fiber optic network capable of handling the live broadcasting of multiple 4K video streams, while supporting live video editing over the network from a new 100TB storage device, replacing obsolete Windows 2003 servers with Linux-based servers and open source technologies, and migrating the organization from Exchange Server 2007 to Google Apps for Business.

Thingee Digital | Senior Web & iOS Developer | Parsippany, NJ

Nov 2009 – Jul 2012

- Full stack web development for pharmaceutical and commercial clients, updating, enhancing, and debugging Rails-based sites, developing custom WordPress templates, and handling monthly maintenance and updates
- Configured and deployed bare-metal on-premises servers at client datacenters and cloud-based virtual machines utilizing RackSpace, Amazon Web Services, Heroku, Linode, and DigitalOcean.
- Developed a digital instruction manual with interactive 3D models to be used on iPod Touches for the engineers at a local U.S. military depot to replace large binders of written materials, prior to the release of the iPad.
- Presented a new software product idea to management to increase revenue. Developed and deployed the product after a successful pilot program, which led to an additional \$1.5 million in revenue by the end of the first year. The service utilized a Ruby on Rails API with a web interface that the client's management team could access to upload and assemble their interactive marketing materials, manage user access, and view end-user session analytics. End-users utilized an iPad application to download & present their materials, collect lead data, and send follow-up materials.

Binary Development | LLC for Consultation Work | Elizabeth, NJ

Mar 2010 – Present

- Provide small-scale managed Linux hosting solutions, custom web and mobile iOS applications using Ruby on Rails to create web-based content management systems and APIs, along with Objective-C.
- Developed a Proof of Concept application with a pair of entrepreneurs in NYC as the sole engineer, named Ocho (<http://ocho.co>), which earned a \$1 million investment from Mark Cuban. It was a social network consisting of 8-second video clips with filters. However, Vine beat Ocho to market and dominated media coverage during our launch after being acquired by Twitter.

EDUCATION

New Jersey Institute of Technology

2006 – 2011

Completed 97 credits towards a Bachelor's of Science in Information Technology with a minor in Web Applications before leaving to accept a full-time position as a Senior Web and iOS Developer.

SIDE PROJECTS

Musing.io | Core Contributor (Development and DevOps)

Jul 2018 - Mar 2019

Decentralized Q&A platform that rewards upvoted questions and answers with cryptocurrency payments

- Adopted as a passion project to help guide the existing team on best practices for production-ready application development and infrastructure planning
- Built using Node.js, React, MongoDB, Redis, AWS EC2 servers, and the Steem blockchain
- Migrated the service to use containerization with Docker and rebuilt the infrastructure to adopt continuous integration and deployment, while improving security, durability, and extensibility
- Currently decoupling the Node.js and React admin control panel from the rest of the public-facing application and trying to instill SOLID principles in the current development team to create a more maintainable codebase

Dreamcatcher | Creator and Lead Developer | github.com/binarydev/dreamcatcher

Aug 2016 - Present

Microservice providing a lightweight API for generating PNG and PDF representations of a web page

- Exposed a lightweight API interface using NodeJS and Express.
- Incoming requests trigger calls to NightmareJS, which runs an Electron UI to render & export the target URL.
- Containerized using a virtual frame buffer (xvfb) for rendering the window environment in Ubuntu.
- Configured a Docker CI pipeline that builds a new docker image when changes are pushed to the repo
- Adopted by all production apps in Persado, replacing PhantomJS and Selenium for image and PDF exports

NDC Financial Reporting Portal | Sole Developer

Jan 2016 - Present

Internal financial reporting tool for a Prescription Discount Program (in-person demo available)

- Created a backend Ruby on Rails API that interfaces with a Backbone+Marionette frontend application.
- Implemented a background process that handles the processing of uploaded Excel documents, parsing financial data for monthly reporting.

- Using imported financial data, monthly and YTD payout reports are calculated for users to monitor their individual performance and for admins to monitor overall performance of the business.
- Encryption of private and financial payout data entered by the user utilizing an AES256 cipher. This data is used to populate W9 PDF documents and to generate monthly payout reports for ADP direct deposit transactions in Microsoft Excel format.

LEADERSHIP + AWARDS

Core Contributor for Development and DevOps, Musing.io	Jul 2018
Lead Technical Advisor for Augmented and Virtual Reality, SkyTank Labs	Jan 2018
Top 3 Most Valuable Employees for 2017, Persado Employee Recognition Program	Dec 2017
Above and Beyond for 2016, Persado Employee Recognition Program	Dec 2016
Prototype app earned \$1 million investment from Mark Cuban, Ocho (8 Second Video Social Network)	Nov 2013