Don Luchini

Quincy, MA   (617) 606-2940   don@hardwarehacks.org

Objective

I seek to help organizations grow by automating processes, fostering cross-team communication, introducing and educating myself and others on new tools and technologies, and engaging with the broader DevOps community.

Key Skills

Programming
Fluent in Ruby, Python, and shell. Comfortable in C#, C, Java, and PL/SQL. Hobby-level assembly (MIPS, 68k, x86).
Operating Systems
Significant experience with CentOS/RHEL 5, 6, and 7; Ubuntu 14.04, 18.04, and 20.04. Long time Debian user.
Frameworks
Significant experience with Amazon Web Services, Kubernetes, the JVM (performance and latency tuning), Rails, and Wildfly / JBoss AS. Experience with Spring, Django, and Drupal.
Tools and Technologies
Ansible, Artifactory, Chef, CloudFormation, Consul, Databricks, Docker, Dynatrace, ECS, Elasticsearch, Grafana, Helm, InfluxDB, Jenkins, Maven, MySQL, New Relic, Oracle RDBMS, Packer, Postgres, RabbitMQ, Redis, Terraform, Vault.

Work Experience

Principal Software Engineer, Abacus Insights (Boston, MA) – 2022-Present
- Helped architect and bootstrap a HIPAA- and HITRUST-compliant data platform on top of Databricks and Kubernetes, featuring a non-Internet-routable network for secure data processing, strong separation of concerns, and provisions for safe co-residency of workloads.
- Provided technical guidance to multiple engineering teams, by way of both active (pairing, troubleshooting, coaching, instructing) and passive learning (seminars, documentation).
- Rolled out a production operations process, enabling internal end users of Engineering-owned applications to report on and help prioritize issues.
- Provided business context to product managers, enabling them to make informed decisions about what to build.

Staff Engineer, SimpliSafe (Boston, MA) – 2020-2022
- Containerized a monolithic PHP application fronting the company website that formerly ran on a single server, and scaled it to support significantly increased system sales traffic for Black Friday and Cyber Monday.
- Created ephemeral environments for applications using Jenkins and Kubernetes, against which integration tests ran on each commit.
- Established an office hours program for more senior engineers to mentor more junior engineers, to make up for some of the in-person mentoring opportunities that the 2020 COVID-19 pandemic took away.
- Led migration from an in-house metrics stack to Honeycomb.io, without interruption to the existing metrics system by implementing fanout of metrics on top of a message bus.
- Implemented AWS WAF, with layered configurations made both globally (by a security team) and per-service (by the implementing team).

Staff Engineer, CloudHealth by VMware (Boston, MA) – 2016-2019
- Grew the DevOps team to eight engineers in two time zones. Team members utilized domain knowledge to abstract away deep details from non-subject matter experts, enabling others to modify, troubleshoot, and ultimately own unfamiliar systems.
- Introduced Jenkins as code, for pipeline developers to design and test their workflows without modifying production. Pipelines deployed into and tested against short-lived CI environments, a legacy Ruby on Rails environment, and services deployed into Kubernetes.
- Expanded the use of Terraform to build out resources across environments (dev, stage, prod) and tools (AWS, Datadog, Kubernetes), with a focus on enabling code reuse across environments and projects.
- Pivoted the unit of scale from Amazon EC2 instances to auto scaling groups, enabling growth from 750 static instances to 4000 peak instances, depending on both system load and time of day.

- Introduced Chefspec, Test Kitchen, Packer, and Artifactory to stabilize an existing Chef-based delivery process, with an end goal of making deployments of a legacy environment repeatable with a small time investment.
- Provisioned and supported shared infrastructure such as MySQL, Redis, and Elasticsearch databases, Kubernetes clusters, and RabbitMQ and Kafka brokers.
- Provided instruction, both on-team and off-team, in tooling and best practices for monitoring, observability, high availability, and compliance, as well as training on whole-system architecture.

Senior Software Engineer, EnerNOC, Inc. (Boston, MA) – 2011-2016
- Implemented a Chef workflow utilized both within and outside of the DevOps team, with a focus on minimizing the amount of code written by developers, encouraging code reuse, ensuring testability of cookbooks prior to deployment, and maintaining environment agnosticism.
- Utilized Packer and CloudFormation to automate both code and infrastructure deployments to Amazon Web Services. The system was fully immutable, and capable of both rapid scale-up of existing state and automated rollback to last-known-good state in the event of failure.
- Designed Jenkins workflows using the Job DSL plugin to provide an interface for continuous delivery to developers. This workflow pushed 100+ builds per day and was used in both test and production capacities.
- Provided support for legacy systems, including on-call pager rotation, diagnosis and resolution of high-severity issues, platform maintenance activities, maintenance of build and test infrastructure, incremental updates to running environments, and training of new team members on support procedures.
- Involved in architecture reviews for new generation of cloud-native applications utilizing both EC2 and the SaaS facilities of Amazon Web Services, such as DynamoDB, ElastiCache, EMR, and RDS.
- Facilitated improved communication patterns among Engineering, IT Infrastructure, and Operations.

Affiliations and Awards

DevOpsDays Boston – co-organizer (see the DevOpsDays website) and community outreach presenter (see Github: don-code/deploying-scalable-services).
ONUG presenter – presented in panels on resiliency and automation between 2019 and 2022.
Boston DevOps – Member and presenter (see YouTube: Boston DevOps Meetup – Workflow Abstraction).
Boston Jenkins Area Meetup – Member and presenter (see Github: don-code/jenkins_jobdsl_demo).
CloudHealth Chairman's Club (2017, 2018) – awarded by open voting within the organization for demonstrating company values.
CloudHealth Hackathon winner (Spring 2017, Fall 2017) – built proofs-of-concept for running a core legacy application on Kubernetes, and for scaling services up and down dynamically based on work queue depth.
EnerNOC Ship-It Day finalist (2016) – Rearchitected a CPU-bound PL/SQL application using OpenCL.
EnerNOC FedEx Day winner (2014) – Implemented a control and monitoring system compatible with the existing EnerNOC hardware platform using off-the-shelf parts, including a Raspberry Pi.

Education

B.S. in Computer Engineering, Rochester Institute of Technology, Rochester, NY (2009-2013)
  Capstone Design Project: Built a home energy monitoring and control system around the Raspberry Pi and XBee radios, allowing arbitrary off-the-shelf home electronics to be remotely managed.

Open Source Projects

Chef community – I attempt to contribute to community cookbooks, rather than forking or in-housing features.
Jenkins Job DSL – contributed support for remote job tokens for the Parameterized Remote Trigger Plugin.
Packer – contributed additional configuration steps to the Chef provisioner.

Hobbies

Electronics projects let me code against the physical world, with Christmas lights that respond to Datadog metrics.
I enjoy getting back to nature with friends by **hiking**, and photographing the views at elevation.
I received my black belt in **Shohei-ryu Karate** in 2018, and teach classes several times per week.
I have a soft spot for **classic cars**, and sometimes can be found driving a restored 37-year-old BMW E30.