# CHRIS MOSETICK

7708 Highland Park Way SW Seattle, Washington 98106 206-849-9088 chris@chrismosetick.com linkedin.com/in/cmosetick github & twitter @cmosetick

#### **PROFILE**

As a technology professional I've worked with a multitude of different technologies and systems spanning a decade. My five year stretch helping to build tech startup Revolution Analytics has resulted in an acquisition by Microsoft Corp. (http://goo.gl/oqhvng)

I have almost ten years experience with several Linux distributions. I've presented on topics such as file systems and IPv6 networking and and have expert level proficiency in a variety of technical areas. My attention to detail is looked up to by current and former colleagues. I have uncanny troubleshooting skills and an ability to make disparate connections between seemingly unrelated systems, tools and processes.

I strive to be approachable and personable in my daily interactions with co-workers that are both local and around the world. As a technical leader I'm always researching and experimenting with the latest technologies, whether open source or proprietary.

## SELECTED TECHNOLOGY OVERVIEW

AWS Tools ⊅EC2, EBS, S3	Software <b>∄</b> Debian, Ubuntu, CentOS	DevOps Tools
<b>⊅</b> Lambda	<b>オ</b> Apache2, Nginx, HAProxy	<b>≉</b> Ansible, Chef, Terraform
<b>⊅</b> ECS, ECR	<b>オ</b> Jenkins, Hudson, Travis-CI	<b>⊅</b> bash, ruby, python, Go
<b>⊅</b> CloudFront, ELB	<b>⊅</b> Jira, Confluence	<b>オ</b> VirtualBox, KVM
<b>≯</b> AutoScaling, Route53	<b>⊅</b> Github, Bitbucket	<b>⊅</b> Docker, Vagrant
<b>⊅</b> RDS, DynamoDB	<b>≯</b> yum, rpm, apt, dpkg, zypper	<b>⊅</b> Joyent, RackSpace, OpenStack

### SELECTED EXPERIENCE

# Senior Dev Ops Engineer CloudMunch

July 2015 – Present Seattle, WA

- Led project migrating entire team and repositories to abandoned Github Organization.
- Created POC for distributed backend for the enterprise CloudMunch GUI using HDFS.
- Created Terraform templates for HDFS cluster creation in EC2, optimizing resources and the time required to deploy them.
- Created documentation framework using ReadTheDocs / Sphinx markdown rendering engine.
- Numerous enhancements and upgrades to existing Ansible playbooks.

## Dev Ops Engineer RedWire Services

August 2015 – Present Seattle, WA

RedWire is an established and growing AWS managed services partner looking for expertise in AWS technologies and Linux system engineering. I was offered a full-time position with the company, but was more interested in being in the startup world. I opted to be an hourly consultant for projects that would interest me, and available as my free time and other responsibilities allow. I have a company email address and occasionally check in with the team on Slack to see if they have any projects that I can help out with or if there is anything interesting coming up soon. Below is an example of a project I have recently worked on for a RedWire customer:

• Setup Amazon Linux systems with native ZFS-on-Linux for a customer POC involving 800GB+ Postgres databases. The goal was to prove that by using built-in ZFS compression algorithms (GZIP and LZ4) that we could significantly reduce the size of EBS volumes required to store the existing databases (reducing monthly costs noticeably) without significantly reducing the performance of Postgres. This project required setting up multiple instances for A/B testing and pulling in the data from daily backups of the existing production databases.

## Dev Ops Engineer Revolution Analytics

April 2014 – May 2015 Seattle, WA

Recently promoted and part of the new Open Source Solutions department at Revolution Analytics, I also collaborate with multiple teams at Revolution including the Seattle based software engineering team, and the IT team.

In 2014 I was a major contributor in the design and implementation of a new open source toolkit designed for creating reproducibility in R programming environments - the Reproducible R Toolkit. (RRT) <a href="http://goo.gl/sX4PTN">http://goo.gl/sX4PTN</a>

The other half of the RRT project required a new server architecture be built to accommodate the high rate of change in the ever growing open source R package community. I was the R&D project lead on what I eventually named the *Modern R Archive Network*. (currently known as 'Managed') <a href="http://goo.gl/b0qLaF">http://goo.gl/b0qLaF</a>

MRAN is a Node.js based web site served via Nginx. It also stores large quantities of source code and binary data implemented as *checkpoint-server* and was designed to be a snapshot capable system so the client side checkpoint package can tie into the server side snapshots that the system creates.

Built to allow for maximum flexibility of the hosting environment, MRAN uses ZFS as the basis of the storage system. It can run equally well in any public or private cloud environment (OpenStack, EC2, Digital Ocean), or even on bare metal.

(Revolution Analytics continued)

The R&D phase of the RRT/MRAN project required me to interact with R programmers and web developers so we could make sure the client and server side portions of the system would work seamlessly together. This required collaborative coordination across multiple time zones as well as solid inter-team communication so everyone was on the same page regarding feature adjustments and general code changes.

Architected Jenkins-CI / Github integration into testing/staging server for MRAN so new code commits can be immediately previewed by all team members on the staging server, before changes go live on the production systems.

A major advocate and evangelist for the use of Docker containers in the organization and I also used Docker for RRO build systems and isolated test environments.

## Senior Systems Engineer Revolution Analytics

August 2013 – April 2014 Seattle, WA

As the Revolution Analytics IT department needed to grow beyond one person, I was the lead in the successful on-boarding of additional employees to the IT team. I'm proud to say that all these employees are still with Revolution today.

As much of my focus at Revolution had been on Linux systems, I worked closely with the first new junior admin who we brought in to spend time on core networking upgrades and Windows system administration tasks.

I trained the second junior admin on advanced Linux admin tasks as well as AWS practices and concepts to help off-load some of my growing workload.

In September and October of 2013 I was a key organizer in the migration of Revolution's Palo Alto, CA office to a larger office space in the neighboring town of Mountain View. This project required an initial visit and consultation of both the existing office and the proposed office space in order to devise a comprehensive plan for success. For the new office space I consulted and interacted with the electricians, ethernet cabling teams, ISP, as well as the building engineer.

After careful planning we reached the actual move date. In October 2013 I coordinated a small team of consultants that were brought in strictly to help with the migration of equipment from the old office to the new office, including the corporate phone system. One key item for the office move was upgrading the WiFi access points to a new system that could sustain a much larger number of simultaneous users than the legacy system. We also needed to be able to monitor and inspect the WiFi network from Seattle, so I chose a cloud enabled system for deployment.

In January of 2014 myself along with the rest of my Seattle based IT team we migrated all of the servers and equipment I had setup, configured and maintained in the office based server rooms to a new dedicated colocation facility that would better serve the needs for uptime and service level agreements within the company.

In March of 2014 as a new Open Source Solutions department was forming within Revolution Analytics, I was promoted to be a founding member of the new department.

# System Administrator Revolution Analytics

February 2010 – August 2013 Seattle, WA

Work in concert with a team of experienced technical engineers and software developers. Utilize an Agile software development method and Jira issue tracking for delivering high performance statistical software to Enterprise, Government and Academic customers.

- Install Cloudera Hadoop, CDH3, CDH4 on bare metal Linux clusters and Linux virtual machines
- Created successful port of Netezza Emulator environment from Win7/VMware Player to VMware ESXi hosted environment
- Install and administer IBM-Platform LSF versions 7, 8, 9 on RHEL 5/6
- Create SLES 10 and SLES 11 base operating system images for Teradata DB development
- Orchestrated the move of our Palo Alto office to Mountain View in late 2013
- Helped deploy Linux virtual machines for Revolution R and Greenplum DB development
- Experienced with EC2, EBS, AWS including key management for SSH access
- Experienced with Rackspace Cloud (Gen1 and OpenStack)
- Created custom backup system using Jenkins, Udev rules and rsync
- Detailed knowledge of Public Key Infrastructure concepts (SSH key policies)
- Helped design and implement ZFS based multi terabyte tiered storage system for virtual machines utilizing a mix of Solid State and Hard disk drives with different storage capacity and performance levels
- Deployed Centrify Auth for Active Directory based authentication to Linux servers
- Initiated and oversaw the rollout of a new VPN solution for the Seattle office and remote team members
- Administer MySQL databases on Linux and Windows platforms
- Helped transition the company name from Revolution Computing to Revolution Analytics, web site redirects, Google Apps
- Setup the currently used community CRAN mirror for Revolution at cran.revolutionanalytics.com, http, ftp and rsync access to the mirror
- Install and configure DenyHosts brute-force prevention software on public facing company servers
- Company wide owner of hostmaster@, security@, root@ and admin@ emails

# System Administrator, Founder

July 2004 – July 2010

**Various** 

808 Consulting

• Meet with clients to determine details for in-office server configurations

 Perform customized server installations designed for each customer's particular situation.

- Follow up with clients at designated intervals to make sure all server infrastructure continues to meet needs as time passes.
- •On Call to respond to any immediate needs or emergencies effecting clients

#### COMMUNITY

I attend monthly Meetups meetings in Seattle Area on a regular basis.

- · DevOps Meetup
- Docker Meetup
- Ansible Meetup
- AWS Architects + Engineers Meetup
- Chef Meetup
- League of Professional System Administrators lopsa.org
- Seattle Area System Administrators Guild sasag.org

Attend monthly meetings with technical presentations to increase my knowledge base and stay current on real world technology trends.

- July 2010 monthly presenter, "IPv6 for SysAdmins" <a href="http://y2u.be/ytopeqx3eK0">http://y2u.be/ytopeqx3eK0</a>
- November 2010 monthly presenter, "Intro to ZFS for SysAdmins"

## Apache HTTPd Facebook Group Admin

I've been the administrator for the Apache web server Facebook group for several years. I moderate and stimulate group discussions and help answer questions posted to the group.

OpenIndiana operating system community member openindiana.org

Helped establish a libre/open alternative to Sun-Oracle Solaris after the closure of the OpenSolaris project. Significant because of its native, Open Source ZFS technology. I discovered and reported numerous system bugs to the project bug tracker. One of eight individuals with commit/edit access to main project website. I also contribute to the project wiki and help out in the project IRC channel.

## • Linux Fest Northwest linuxfestnorthwest.org

I attend LinuxFest NW each year. Held the last weekend of April, it's a fun, free software oriented conference with a good mix of tutorials, talks and professional networking, as well as a large vendor area.

## **EDUCATION**

## Bachelors of Applied Science, Computer Systems Administration, 2004

Arizona State University: Polytechnic Campus Mesa, AZ

Glendale Community College Glendale, AZ

## IPv6 Certified Sage, 2010

Hurricane Electric Internet Services - http://goo.gl/gNVwkl

## 2015 CONFERENCES + WORKSHOPS

DataDay Seattle - June 27th, Westin Seattle

OpenStack Day Seattle - August 20th, Washington Athletic Club, Seattle

AutomaCon - September 15th-16th, Portland Art Museum, Portland, OR

Speaker, Ignite Seattle 28 - September 17th, Town Hall Seattle http://youtu.be/sdw6FIFKnco

Building Infrastructure with Kubernetes, Ansible, AWS - October 15th, Galvanize Seattle

Hackaday Super Conference - November 15th - Dogpatch Studios, San Francisco, CA