

# ALLIE BARNES

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⚡ <http://allieb.me>

Linux lover with a sponge brain currently serving as Operations Engineer with a desire to enter the InfoSec field.

## EXPERIENCE

### CLOUD OPERATIONS ENGINEER

#### *Infocyte (Apr 2019 - Present)*

- Maintain & deliver infrastructure DevOps roadmap
- Manage AWS-hosted infrastructure & services (EC2, ECS, etc.)
- Lead & mentor other Operations team members (small team)
- Research & test architectural options/solutions in infrastructure
- Write & maintain playbooks to automate infrastructure provisioning & management (creating/configuring instances, database server backups, etc.)
- Deliver monitoring & log analytics solutions to environment
- Maintain & eliminate technical debt across environment
- Develop internal documentation regarding infrastructure
- Speaking about product layout and features at IIA/ISACA Chicago 2019

### OPENSTACK ENGINEER

#### *Rackspace Hosting*

*Aug 2015 - Feb 2017, Oct 2018 - Apr 2019*

- Operating, updating, and troubleshooting Red Hat OpenStack and OpenStack-Ansible distributions
- Providing subject-matter expertise to the team on Red Hat OpenStack, including spreading knowledge such as developing documentation and presenting BrownBag sessions
- Hands-on experience with Pacemaker & managed services on Red Hat OpenStack

- Network troubleshooting cloud environments inside of net namespaces & across physical network interfaces
- Operation, administration, troubleshooting of different container types on different OpenStack distributions
- Basic administration & troubleshooting of environments with Ceph storage deployments
- Troubleshooting core & supporting OpenStack services
- Performed numerous OpenStack deployments of Red Hat OpenStack
- At-scale management of OpenStack cloud environments with Ansible
- Assisted with RHOSP product evaluation & bug reporting (to Red Hat QA team)
- Contributed to providing internal documentation for Red Hat OpenStack & Ceph Object Storage
- Provided technical information contributing to public-facing articles relating to OpenStack

## OPERATIONS ENGINEER

### *TeamSnap (Apr 2017 - Oct 2018)*

- Wrote playbooks with Ansible playbooks to automate infrastructure management and operations tasks
- Implementation & management of Docker containers hosting microservices to be deployed into Kubernetes
- Work on-call shifts & respond to alarms/incidents
- Provide company IT Support (VPN management, email administration, etc.)
- Administration & troubleshooting of F5 load balancers (at client-level)
- Automation of deployment & implementation of monitoring & log analytics tool (DataDog)
- Implementation, administration, and troubleshooting of Kubernetes cluster
- Automated creation & management of infrastructure with Terraform

## LINUX ADMINISTRATOR

### *Rackspace Hosting (Jan 2012 - Aug 2015)*

- Began with very little experience in tech; was accepted into Rackspace's "Team New Talent" program for incoming Rackers to gain enough Linux experience to successfully support customers in a hosted environment
- Managed large enterprise linux environments for Rackspace's largest (F1000) customers
- Respond to customer requests regarding dedicated & cloud-hosted Linux environments via phone calls & ticketing system
- Respond to monitoring alarms related to server resource consumption issues such as high CPU, low-disk availability, etc.
- Wrote and quality-checked maintenance plans for scheduled customer downtime events
- Reported issues & product feedback with internal automation systems
- Served as escalation point to other Linux administrators on team, routinely mentored peers & new Rackers
- Routinely participated in mentoring newcomers to the Linux community in CyberPatriot & with Rackspace Cloud Academy's "Linux for Ladies" program
- Screened potential Linux candidates for consideration via phone-screen and face-to-face interviews

## SKILLS

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### HANDS-ON EXPERIENCE:

- Maintaining entire cloud infrastructure and resources of startup environment
- Implementing basic environmental necessities such as monitoring health-checks, log analytics, and resource provisioning automation
- Responding to on-call shifts, alarms, and incidents with PagerDuty & Slack
- Writing automation tasks via Ansible for infrastructure management, application deployments, etc.
- Managing infrastructure resources across various cloud platforms (Google, AWS, Rackspace/OpenStack)
- Implementation & configuration of Kubernetes on different cloud platforms (Google, AWS)

- Writing service deployments for applications into Kubernetes
- Implementation, operation, troubleshooting of different container platforms (LXC, Docker in self-hosted, Kubernetes, and AWS ECS environments)
- Using Terraform to automate infrastructure management across different hosting providers
- Implementing, managing, creating dashboards on analytics platforms such as DataDog, Kibana, Grafana
- Automation of analytics software such as DataDog with Ansible
- Configuring pipelines in Spinnaker to assist with automated CI/CD deployments to Kubernetes
- Implementing & managing OpenVPN to run a self-hosted company VPN server
- Implementing OpenStack deployments using automated tools like Ironic, Heat, Puppet, and Ansible
- Management & troubleshooting cloud services such as Nova, Glance, Ironic, Heat, Neutron, Cinder, Swift, Ceph, Keystone, etc.
- Management & troubleshooting of core supporting technologies in cloud environments such as RabbitMQ, Galera, HAproxy, memcache, OpenvSwitch/Linux bridges, MySQL
- Tuning F5 connection pools to improve performance based on resource consumption
- Network management & troubleshooting in cloud and dedicated hosting environments
- Server-side management of database platforms such as MySQL & PostgreSQL
- Writing technical documentation to be consumed by non-technical audiences, internal & external
- Infrastructure-side deployment of Ruby/Elixir-based microservices
- Server & container-level management of resources hosting NodeJS applications
- Heavy experience managing AWS services (EC2, ECS, Route53, CloudWatch, CloudTrail, GuardDuty, etc.)
- Basic experience securing environments at the infrastructure-level (firewall)

## CERTIFICATIONS

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RED HAT CERTIFIED SPECIALIST IN ANSIBLE AUTOMATION

Mar 2019 - March 2022

RED HAT CERTIFIED ENGINEER

July 2013 - March 2022

## RED HAT CERTIFIED SYSTEM ADMINISTRATOR

Dec 2012 - March 2022

## RED HAT CERTIFICATE OF EXPERTISE IN SERVER HARDENING

April 2015 - April 2018

## RED HAT CERTIFIED SYSTEM ADMINISTRATOR IN RED HAT OPENSTACK

Feb 2016 - Feb 2019

## COMMUNITY

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- Volunteer & Interim CTO of **BADASS ARMY**, a non-profit organization dedicated to supporting victims of revenge porn
- Participate & assist in maintaining CTF Team (**CTF Circle**)
- Community presentations:
  - **Confessions of a SysAd (Linux Edition)**
    - BSidesRGV, BSidesSA, Texas Linux Fest, BSidesBCS (Feb 2020), NOLAcon (May 2020)
  - **From Zero to Hero: Going From Dropout to Engineer in > Decade**
    - Texas Cyber Summit
  - **Naked & Unafraid: Keeping Your Private Pics Private**
    - Dallas Hackers Association