Jason Kölker

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SUMMARY

Skilled IT strategist and solution developer, with more than 15 years of cross-platform expertise and a strong background in software and networking development. Red Hat Certified Engineer, with fluency in multiple programming languages and a diverse skill set encompassing software defined networking, data storage and backup, and fleet automation.

TECHNICAL HIGHLIGHTS

Cloud:	AWS, Google Cloud, OpenStack
Containers:	Kubernetes, Docker
Languages:	Go, Python, C, C++, Java, C#, bash, Erlang
Networking:	VxLAN, OpenVswitch, OpenFlow, STT, BGP, EVPN
Services:	Apache/nginx, Bind, OpenLDAP, Active Directory, ElasticSearch, HAProxy
Systems:	Linux, Windows, *BSD, Solaris

EXPERIENCE

2021 – Present   **FloatMe**   **San Antonio, TX – Remote**

Principal Software Engineer   *2022 – Present*

Staff Software Engineer   *2021 – 2022*

- Re-Architect App from monolith code base to micro-services.
- Champion repo organization with a focus on CI/CD, developer productivity, and Infrastructure as Code.
- Institute "Guild" system for cross team collaboration and specialization.
- Redesign authentication system to proxy through CloudFlare workers, providing additional tools to prevent abuse.
- Implement mTLS between app and API with option for certificate rotation outside of app deployment life cycle.
- Co-Lead with Head of Product re-organization of product and development interaction with a focus on agile software development.
- Provide Technical Leadership and Mentoring growing team from 7 Software Engineers to over 30. Define roles and levels for Engineering Org providing clear responsibilities and career progression path.

2018 – 2021   **D2iQ / Mesosphere**   **San Francisco, CA – Remote**

Senior Software Engineer – Mesosphere   *2020 – Present*

- Took over maintenance and Point of Escalation duties for the DCOS Network stack.
- Worked with customers and stakeholders to standardize Edge-LB "Self-Service" and set deprecation schedule for Marathon-LB.
- Ensured continuity of support for customers via on-call and escalations, troubleshooting the entirety of the DCOS stack.

Senior Software Engineer – Kubernetes   *2019 – 2020*

- Spearheaded CI testing of charts for Pull Requests and main branch.

Senior Software Engineer – Networking   *2018 – 2019*

- Lead development efforts of "Self-Service" Edge-LB. Defined Mesos task labels to drive templated Edge-LB pool configuration, allowing end users to expose their applications automatically.
- Championed maintenance of Marthon-LB. Reviewed and merged backlog of community contributions, refactoring where needed to work with current project codebase.

2017 – Present   **ColorBit LLC**   **Midlothian, TX – Remote**
Co-Owner / Technical Lead   *2017 – Present*
- Developed patent pending LED light controller. Leader of all technical aspects of the business including device schematics, PCB production, firmware development, and API definition.
- Worked with potential customers to identify bugs and wanted features, translating into actionable items to improve product.
- Provided support and guidance to Marketing team to track and derive various metrics.

2016 – 2018   **JungleDisk**   **San Antonio, TX**
Senior Developer / Architect   *2016 – 2018*
- Spearheaded the efforts to modernize the desktop client build system from separate platform specific systems to shared CMake based system.
- Provide Architecture and Deployment assistance transitioning services off dedicated bare metal into containers.
- Lead migration of client data from Rackspace Cloud Files to Google Storage.

2007 – 2016   **Rackspace Hosting**   **San Antonio, TX**
Senior SDN Developer   *2013 – 2016*
- Lead a team of five in the design and deployment of software defined networking products for the leading managed hosting company's Public Cloud, with responsibility for providing secure bridged publicnet and servicenet connectivity, and serving as development lead in the effort to decouple from vendor-controlled connectivity
- Research and implement OpenFlow controllers to provide floating IP connectivity from public internet IP space onto isolated private networks
- Implement VIF-to-VIF L2 connectivity via STT and VxLAN encapsulation coordinated through BGP and EVPN

Ozone Openstack Developer   *2011 – 2013*
- Worked on a wide range of projects for the Rackspace Openstack platform, including Nova, Quantam, Melange (core-dev), and Openstack-Common
- Re-wrote most of the Nova networking code to allow for external services (Quantum/Neutron) to control network allocation and management
- Bootstrapped the Openstack-Common project to centralize code common to multiple Openstack projects, reducing copy-and-paste bit-rot
- Created the Openstack-Nose project to provide common test output across Openstack projects as a nose plugin, enabling test failures to be masked when previously each project was subclassing TestRunner directly
- Provide technical leadership to the product management team and junior developers for the Cloud Networks initiative following Agile and iterative development methods

Backup Automation Developer   *2007 – 2011*
- Developed applications and tools to administer and troubleshoot backup and storage offerings, including backup failure notification, backup set management, tape tracking, storage reporting, and storage provisioning
- Grew position from a sole-contributor role to a team of four developers during four years in role
- Re-designed and implemented a backup reporting database, including consolidation of data from more than 50 MSSQL servers into a single reporting database, allowing for arbitrary queries to be run against the set of MSSQL servers and aggregating/normalizing into consistent formats
- Initiated, architected, and assisted in the development of the "Holland Backup System" to replace legacy MySQL backup solution, including creation of a council of developers and advocates to lead the project, coordination and hosting of Code-Jams to bootstrap the project, and championing open sourcing efforts

- Led the backup platform migration from Legato to Commvault for more than 10,000 servers, developed application and tooling scripts to automate 90% of the migration, and created guidelines for QC/QA efforts

2006 – 2007　　　　　　　**Placemark Investments**　　　　　　　**Dallas, TX**
Systems Engineer
- Provided comprehensive systems administration support for a leading provider of investment portfolio management software services, with responsibility for a small Windows domain encompassing more than 200 users at two locations, and managing connectivity between office locations and a co-location facility
- Re-designed the company IP address space from legacy single RFC 1918 class C to a scalable, multi subnet network, and assisted with the re-setup of OpenBSD pf firewall for the new network scheme using CARP and VLAN interfaces for redundancy and port utilization efficiency

2002 – 2006　　　　　　**Rackspace Managed Hosting**　　　　　**San Antonio, TX**
Service Innovation Programmer　　　　　　　　　　　　　　　　　　*2005 – 2006*
- Led a wide range of free-form problem solving and process automation projects, including development of a script that automated collection of backups provisioning commands and ticket updating, allowing backup administrators to focus on issues rather than collecting data from systems to build commands
- Created a Windows 2003 Service Pack 1 Updater program for more than 20,000 Dell 2650 and 2850 servers,including application of bios patches, OpenManage upgrade, and Service Pack 1 installation

Team Lead — SMB Managed Backup　　　　　　　　　　　　　　　　　*2005*
Support Systems Administrator　　　　　　　　　　　　　　　　*2004 – 2005*
Datacenter Operations Technician　　　　　　　　　　　　　　　*2002 – 2004*

PATENTS

US 9141410　Pluggable allocation in a cloud computing system
US 9628328　Network controller with integrated resource management capability
US 9967111　Software-defined multinetwork bridge