

Jay Johnson - jay.p.h.johnson@gmail.com

GitHub: <https://github.com/jay-johnson> Website: <https://jayjohnson.com/>

Summary

Solutions architect with 16+ years of experience in software development, architecture, design and implementation of large distributed, real-time systems across a variety of environments.

- Trusted advisor and open source enthusiast focusing on security, cost optimization, high availability, managed services, and leveraging technical expertise to help customers scale and reduce downtime.
- Experienced architect building and managing products running either on-premise or in the cloud.
- Over 60 container images on my docker hub account: <https://hub.docker.com/u/jayjohnson>
- Creator and maintainer of many python pips on pypi: <https://pypi.org/user/jayjohnson/> with documentation: <https://readthedocs.org/profiles/jayjohnson/>
- Creator and maintainer of the rust secure-by-default Rest API crate: <https://crates.io/crates/restapi>
- Presented at Redis Conf 2017 and an inventor on patent 9,342,299 for "Deployment optimization for activation of scaled applications in a multi-tenant platform-as-a-service (PaaS) system" for OpenShift.

Expertise and Skills

Programming: Python, Rust, Ruby, C/C++, bash, git, Django, Flask, Ansible, REST APIs, Redis, Messaging, ORM, Jenkins, MySQL, Postgres, Kubernetes, Helm, OpenShift, Docker, curl

Clouds: Amazon Web Services, OpenStack, Azure

AWS Services: VPC, Subnets, Peering, VPC PrivateLink, NAT, Security Groups, CloudWatch, CloudTrail, S3, EC2, ALB, NLB, ELB, Target Groups, ASG, ACM, IAMs, EBS, AMI, ElasticIPs, Route53, WAF, EKS, ElastiCache, RDS, CloudFormation, SecretsManager, Systems Manager (SSM), CodeCommit, ECR, Lambda, SQS, SNS, SES, KMS, Flow Logs

Environments: Linux, Fedora, Red Hat, Ubuntu, Debian, CentOS, Alpine, Amazon Linux, VirtualBox, Windows, Mac OS X, VMs, KVM, QEMU, Minikube, QT, Yocto, Solaris

Security: OWASP, National Vulnerability Database, Dependency Checker, TLS, mTLS, openssl, Certificate, Key and Certificate Authority management, Encryption, SSL, Fuzzing

Practices: Microservices, Agile/scrum, Test Driven Development, Continuous Integration, Continuous Deployment, Publisher-Subscriber, Messaging, Write-through caching, Secure by default, Encryption at-rest and in-transit

Data Science: Scikit-learn, Keras, Tensorflow, XGBoost, Deep Neural Networks, Jupyter, AI, Machine Learning, Regression, Classification, Feature engineering, Pandas, Seaborn

Work Experience

T-Systems 2019-Present - Senior DevOps Consultant (Large Connected Car Platform)

- Designed and scaled the AWS backend for a large automotive IoT platform with over 800,000 connected cars driving in multiple countries and capturing ~1 PB of data per year. Targeting over 2 million cars by 2025.
- Designed, secured and managed the ELK monitoring stack for handling over 1.3 TB logs a day.
- Led cost optimization to reduce monthly AWS hosting costs by 78%.
- Delivery responsibilities: thought leadership, implementation, testing, multi-region high availability architectures, risk mitigation, partner enablement, mentorship, recruiting, and success management.
- Technical presales responsibilities: partner development and vetting, helped and coached sales teams in multiple verticals: oil and gas, autonomous vehicles, futures trading, and automotive.
- Provided technical guidance on accounts looking for help with: engineering, cloud, architectural, process, project management, costs, team dynamics, security, privacy, and technical tradeoffs.
- Received T-Systems consulting services award.

Levvel 2015-2019 - Principal Consultant

- Led and mentored teams delivering solutions leveraging expertise in enterprise architecture, techniques, and practices.
- Helping clients with diverse needs: migrating products to AWS services, creating multi-cloud OpenStack event pipelines for one of the largest banks, IoT development and architecture for startups, healthcare compliance, clustering, integrating docker, increasing productivity with CI/CD pipelines, networking, log aggregation, security, DevOps evangelism, legacy modernization.
- Delivery responsibilities: thought leadership, implementation, testing, vendor integration, risk mitigation, mentorship, recruiting, training, account development through successful delivery.
- Technical presales responsibilities: mentored sales teams across verticals including: payments, banking, IoT, healthcare, energy utilities, automotive, education, helped sales efforts across any stack layer including: AWS, docker, OpenShift, Jenkins, messaging, Redis, monitoring (ELK/Splunk), load balancers (F5 and nginx/haproxy), and security, created partner enablement strategy by writing and editing technical blogs about partner products, vetted partners and products for senior management.
- Helped Levvel scale from 30 to over 200 employees with offices on multiple continents.

eNewsPulse 2014-2015 - CTO and Founder

- Built, launched a cloud platform to help investors capitalize off news that moves a stock's price.
- Responsible for full stack, technical architecture, product creation, vision, execution, marketing, and growing a customer base using Stripe for payments and hosted on AWS.

Red Hat 2010-2014 - Senior Consultant

- On-premise backend and embedded device architect on the US and Canada train IoT safety platform supporting wifi, satellite, radio, and ethernet communications for all major railroad companies.
- The train platform supported over 500,000 remote field devices and all trains in North America.
- Cloud architect focused on adoption of Red Hat's OpenShift on premise cloud platform at PayPal and eBay. Designed, architected, and deployed OpenShift for hosting PayPal applications.
- Delivery responsibilities: thought leadership, implementation, testing, vendor integration, risk mitigation, mentorship, recruiting, helping clients use and scale Red Hat products.
- Technical presales responsibilities: Writing and winning RFPs when railroad companies wanted to self-host the train platform, mentoring sales teams on OpenShift product adoption strategies in multiple verticals including: financial services, stock trading, payments, and helped marketing and product teams align OpenShift blogs, videos and demos with the newly-emerging DevOps trends.
- Received Red Hat services award.

Sony Online Entertainment (now Daybreak Game Company) 2008-2010 - Software Engineer

- Software engineering for the Platform team developing, enhancing, and supporting the accounting, ecommerce, fulfillment, game sessions, in-game chat, web teams, subscription, billing, payments, Playstation integration platform, PayPal, Facebook, Chase Paymentech, and fulfillment platforms.
- Built features for more than 12 game teams using our platform to charge customers for recurring monthly subscriptions to play any SOE PC game title (EverQuest, EverQuest 2, SWG, PlanetSide).

4D Neuroimaging 2006-2008 - Software Engineer

- Developed biotech application software in C/C++ to scan the human brain using MEG.

Business Innovations 2005-2006 - Application Developer

- Developed .Net components for clients.

Education

University of Virginia Tech, Blacksburg, Virginia from 2001 - 2005

Bachelor's degree in Computer Science with a Math Minor