**Swati Kher**

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[**https://www.linkedin.com/in/swatisavkarkher/**](https://www.linkedin.com/in/swatisavkarkher/)

**DevOps Engineer**

**EDUCATION**

Master of Science in Computer Engineering,

North Carolina State University

Bachelor of Science in Electrical Engineering,

The University of Texas at Austin

US Citizen

 **S-corporation**: Serena Consulting Inc , **Website/past client** roles: <https://www.serenaconsultinginc.com/clients/>

**SKILLS**

**Cloud Automation and SCM:**

Git/Gerrit, BBKT, stash, Hudson Jenkins, CloudBees Jenkins, Team City/JetBrains, gradle, nodejs, ant , maven, Clearcase, Perforce, SVN, Bugzilla, Jira/Confluence/Bamboo Atlassian, Android SDK, XCode

**Cloud Services:**

AWS S3/RDS/Lambda/serverless, OpenShift OCP Platform, OpenStack Linux Platform, Google Cloud Services, Microsoft Azure, cassandra-as-a-service, redis, zookeeper, nginx-as-a-service, apache httpd, platformas-a-service, infrastructure-as-a-service

**Virtualization:**

VMWorkstation, SoftBox, VCD, LabManager, OpenStack, Docker, Microsoft

Azure, chef, ansible, vagrant, AWS, Azure, OCP, GCP, OpenStack Linux

**Protocols:**

SIP, RTP, ATM, SNMP, TCP/IP, Infiniband, GigE, FCoE, iSCSI

**OS:**

Linux, Android, IOS, Windows Servers, LAMP

**Gaming, Audio/Video:**

Set-top-box, Nintendo Switch, Sony Playstation, Microsoft XBox, Android Phone, iPhone, Vocera Devices,

**Languages:**

C/C++, Perl, Java, VBScript, VC++, C shell scripts, Python

**Database:**

Oracle, db2, SQLServer , mySQL, NoSQL cassandra, mongoDB, postgres, Gremlin DB, ObjectStore

**Test AutomationTools:**

JUnit, JMeter, TestNG, SoapUI, QTP

**EXPERIENCE – Serena Consulting Inc (Corp2Corp) Projects 2014 - Pres**

**DevOps Build Release Experience**

# High Performance Computing Publications

* Achieve (and Maintain) Real-Time Apache Kafka Optimization = https://www.rtinsights.com/achieve-and-maintain-real-time-apache-kafka-optimization/
* Interconnect Helps Efficiency in Clusters = https://www.digitalengineering247.com/article/interconnect-helps-efficiency-in-clusters/
* FLUENT Helps Determine Scalability on Multicore Clusters = https://www.digitalengineering247.com/article/fluent-helps-determine-scalability-on-multicore-clusters/
* Optimizing LS-DYNA® Productivity in Cluster Environments =

**DoD US Navy, Dahlgren, VA 04/2021- Pres**

**DevOps, CI/CD, SecOps**

* Build/Release Automation and Deployment of MK160 Gun Control System
* Build Modules for Missile Defense System with Visual Studio, C/C++, Python3, and Java
* Automate deployment of releases via Satellite
* Atlassian Toolset Administration – JIRA, Confluence, bitbucket,
* Automated Deployment - docker, Openshift, gitlab, sonarqube, jfrog artifactory
* CI/CD pipeline – build/release, gradle, java, ant, maven, squish automated testing, Openstack
* DoD Security clearance and DoD Interim TS Clearance

**Instaclustr, San Francisco 12/2020 – 04/2021**

**Kafka DevOps with Managed Cloud**

* Gather Requirements from Customer, provide Project Timeline for Customer, Work with customer to resolve Production Cluster related issues
* Customer Verifone: Rolling upgrade of production kafka broker and zookeeper from Confluent to Apache
* Customer FISGlobal :Setup Kafka Monitoring with Prometheus, Alertmanager, Grafana, and Webhook
* Automated the deployment in OpenStack with Terraform and Ansible
* Customer T-Mobile: Deploy Kafka-to-Cassandra Microservice to consume messages from Kafka and write to Cassandra in Azure and AWS, terraform, ansible, ansible-playbook
* Configure Kubernetes pod deployment of Kafka Producer and consumer microservices in AWS and Azure
* Configure Kafka SSL, security, authentication, authorization, and ACL
* Kafka deployment with terraform and ansible - deployed 9 machines consisting of Kafka Brokers, Zookeeper, Monitoring Nodes, Schema Registry, and Kafka Connect with Terraform and Ansible in OpenStack

<https://www.rtinsights.com/achieve-and-maintain-real-time-apache-kafka-optimization/>

**Dept Homeland Security, Washington DC**

**Build/Release DevOps 11/2019 – 12/2020**

* AWS Lambda Function, AWS S3, AWS EC2, AWS RDS, SQS, AWS Serverless deployment
* Kafka Security, Kafka encryption = configure encryption on kafka topics
* Apigee microgateway configuration, Apigee OAuth/security configuration, Apigee Developer Apps
* Java Builds, gradle , maven = build/release engineering with maven and gradle
* Postgres, database administration, sql scripts
* Microservices = deploy microservices in OCP with Java
* Apigee = configure apiproxies for microservices and apikeys, configure deployment of REST api proxies
* OCP deployment and administration, Ansible, Jenkinsfile, Groovy, Python3, C/C++
* Test Automation : JMeter, Junit, Jacoco, Smoke Test, Performance Test automation

**Google, Mt View**

**Build/Release DevOps 05/2019-11/2019**

* gcloud docker, gcloud container kubectl api for deployment , GCP CLI (<https://cloud.google.com/sdk/gcloud/reference/container/clusters/create>)
* Cloud Services and Cloud Operations, Kuberneter, GCP, Google Cloud SDK and javascript, python3, REST
* Cloud Automation, Google Cloud Deployments and CI/CD
* Firebase CLI , ReST API, Node.js, javascript and python scripting to access production Firebase Database , gcloud API, compute engine, Google Cloud TPUs, kubernetes and docker

**Wells Fargo, San Francisco 11/2018 – 04/2019**

**Build/Release devOps**

* Create kafka topics, perform replication – ensure replication of schema registry and topics
* Automate deployment of kafka
* Administer, monitor kafka with Elasticsearch and confluent control center for performance and kafka related stats
* AWS Cloud deployment and monitoring, Ansible, Python3, REST

**Cisco Systems, San Jose, 01/2018 – 10/2018**

**Build/Release DevOps**

* AWS , Docker, Monitoring, Cloud Admin, Ansible, Terraform, Java, REST, python3
* Bash and python scripts for monitoring, alerting, Nagios check\_mk, Kafka, and OpenStack services
* Adding inventory and decommissioning C-Series and B-Series servers in OpenStack Service Cloud
* Installing service assurance client to management nodes, nova nodes, and puppet master for monitoring
* **Environment:** Python, OpenStack, Ceph Storage, SolidFire NetApp Storage API, RESTApi, Ansible, Nagios, check\_mk, Elasticsearch, Kibana, Logstash, Grafana, collectd

**Intuitive Surgical , San Jose, Corp2Corp 06/2017 – 12/2017**

**Build/Release devOps ,**

**Reported to : Director of Ops, Ramesh Venkatraman**

* Setup CI/CD pipeline with CloudBees Jenkins, artifactory, code coverage, unit testing, and deployments
* AWS = Resolve deployment issues for Dev, QA, STAGING, and PROD with AWS environment Helix, Habitat, Sitecore
* Generate .ipa file for iPad builds with xcodebuild, Fastlane, ionic, and buddyBuild,
* **Environment:** Java Microservices, NODE.JS, Jenkins, IONIC, Helix/Habitat, AWS, BuddyBuild

**Union Bank, San Jose, Corp2corp 10/2016 – 04/2017**

**Build/Release Engineer,**

**Reported to : VP of Engineering, Gary Laiski**

* Configure Android and iOS builds in Jenkins (Android SDK , XCode)
* Perform Sonar Analysis, AppScan, OWASP Dependency Analysis, Android Lint Analysis
* Monitor Nexus Repository
* Resolve Deployment issues - Stash and Puppet – write YAML files
* Administer: SauceLabs, CloudBees Jenkins
* Build scripts with ant,, maven, and gradle,
* **Environment:** iOS, Android, Jenkins, OWASP, Maven, Ant, Gradle, Sonar, Artifactory, JBoss, Java, Puppet, Stash, git/github, bitbucket, Saucelabs, CloudBees, Banking Applications, AWS

**Apple Inc., Sunnyvale, Corp2Corp 07/2016 - 10/2016**

**Build/Release Engineer,**

**Reported to : Director of Engineering, Kenley Sun**

* Convert Node.JS and scalamatic builds to gradle
* Jenkins cleanup, Jenkins backup/restore, shelve jobs
* Setup CI/CD deployment jobs with Wiggles, AWS
* Provide CI/CD automation with python, ruby, and REST NODE.JS
* Write YAML files for automation
* **Environment**: Gradle, Node.JS, NPM, RPM Packaging, Jenkins, REST NODE.JS, CI/CD, Wiggles, Python

**GE, San Ramon, Corp2Corp 03/2016 – 07/2016**

**Cloud DevOps, Cloud Infrastructure, AWS**

**Reported to : Director of Ops/IT/Engineering, Paul Jusko**

* Write chef cookbooks and deploy docker container for Infrastructure-as-a-service
* Write vagrantfiles for automation and virtualization for Predix platform with CloudFoundry, AWS
* Provide scripts for artifactory, Jira, bamboo, confluence, gitHub, and crowd server
* Schedule maintenance, server downtime, server monitoring with nagios
* Artifactory cleanup with REST NODE.JS, JSON, http
* Automation of Log Transfers with logstash
* **Environment**: Atlassian, github, artifactory, confluence, JIRA, Chef/Vagrant, IaaS, Bamboo, Logstash

**Cisco, San Jose, Corp2Corp 01/2015 – 03/2016**

**Cloud DevOps with Java, CloudVPN, Prime Service Catalog, Kafka, PaaS, AWS**

**Reported to : Director of Engineering, Svetlana Kryukova**

* Manage builds and releases for Cisco Symphony Cloud and for vMS Hybrid Cloud solutions for Platform-as-a-service with OpenStack, Docker, Kafka, Microsoft Azure, and CloudFoundry, AWS
* OpenStack deployment of CIS environment for production p-1, p-2 using cloud foundry automation, Ansible/Docker containers, and python automation scripts
* Configure Cassandra as-a-service and, kafka/zookeeper, and redis.io in the cloud
* Configure microservices
* Maintain continuous integration with git/gerrit, gradle, Node.JS, Jenkins, ant, eclipse, and svn, SonarQube
* Jenkins job for Automation of JUnit tests with Selenium
* Code changes to support Release2Release Upgrades
* Production installer builds with InstallAnywhere
* Jenkins automation of installer testing and REST/SOAP/JSON
* Work with Red Hat to resolve Security Vulnerabilities in latest Virtual Appliance
* Provide code coverage reports : coverity, jacoco, and cobertura
* Verify war file deployment and software-as-a-service with oracle, sql server, jboss,
* vSphere, Cisco UCS Director for Prime Services Catalog cloud services
* For new project, scope out build systems with Gradle, Maven, Grunt, Node.JS, eclipse and Spring Tool Suite
* **Environment**: Jenkins, Cassandra, Kafka/Zookeeper, OpenStack, Docker, Selenium, Spring, Oracle, SQL Server, vSphere, vCenter, PaaS, LAMP, NODE.JS

**Vocera, San Jose, corp2Corp 07/2014 – 12/2014**

**Mobile Test Engineer,**

**Reported to Director of Test Engineering, Marina Tratyakov**

* Test vocera Servers, SIP Telephony Gateways, Client Gateways, jetty server
* SAN Certification Test Plan, NODE.JS Tests for Call Processing
* Test Devices for connectivity : Android Devices, iPhone, Cisco IP Phone, Motorola phone, smartphones
* Test Vocera Collaboration Suite, Vocera Connect apps downloaded from Google
* PlayStore and iOS App Store
* Installer testing , SSL Testing , Upgrade with Windows 2003, 2008, 2012
* **Environment**: wireless, SIP, Android, iOS, CUCM, SSL Web Services, SAN Certification, LAMP

**AMD, Sunnyvale, CA 06/2013 – 05/2014**

**DevOps/Build and Release Engineer – TeamCity JetBrains,**

**Reported to : Director of Engineering, Mark White**

* Build OpenGL/HSA graphics SDK and graphics driver targets WinBlue, Linux,
* Win7, and Win8 with WDK for Kaveri APU
* Python automation for Automated Driver Signing and OS Install
* Test OpenGL/HSA compiler, runtime, KMD/KFD/KIOMMU, Audio/Video
* Setup testbed for Windows 7, Windows 8.1, Linux RHEL6.5 , CentOS, Android with
* Kaveri APU for testing sBIOS, firmware, driver changes for Audio/Video
* Continuous Integration of Windows driver builds, Linux driver Builds, Android driver builds – debug and root cause analysis of build failure issues
* Provide support for continuous integration with Team City and Constructicon
* Perform Cherry Pick, alpha promotions, and bootleg testing on various GPU, APU and flash sBIOS
* Performance Engineer – GPGPU (Perl Framework)
* Compare benchmark results on various GPU architectures such as Turks, Caicos,
* Tahiti, Cayman, and Cypress cards for driver, firmware, and BIOS upgrades
* Tune performance for NODE.JS libraries DXX and OGL tests: Company-of-heroes, Crysis,
* Far Cry, GLBench, 3DMark Vantage
* **Environment**: OpenGL, TeamCity, Perforce, Python Automation, Windows and LAMP

**QA Automation Performance Test Experience 2008 - 2013**

**Cisco Systems (Contractor- CIT) San Jose, CA 06/2012 – 04/2013**

**Python QA: Set-Top-Box Testing**

* Setup Python Framework for Performance Testing
* Test 3DTV, IPTV, HnavIntegration, HDMI, H.264, MPEG codec, Audio/Video
* Axiom, ODN, OCAP: testing stack, middleware, and firmware upgrade for set-topbox testing
* Perform Nightly Regressions, and Configure racks for Set-top-box testing Python Regression Framework
* **Environment**: Python, Audio/Video, 3D, LiveStreaming, HDMI/Composite/Component, LAMP

**ICICI Bank, Pune, India 11/2011 – 05/2012**

**DevOps: Quality Engineer**

* Workload automation, Scheduling jobs, and monitoring status with Control-M/EM, Control-M/Server, Control-M/Desktop with Java Module and DB Modules
* Developing Banking Application and handle Banking Transactions
* Automate backend processes and monitor process for handling Small Business Loan Applications, and Other types of Loan Applications with Control-M
* Providing training in Linux and Control-M
* **Environment**: BMC Control-M, Java Modules, DB Modules, Banking Application

**Blackarrow.tv, Santa Clara, CA 08/2010-04/2011**

**QA: Automation Engineer**

* Automation of NODE.JS testcases using JMeter and JUnit for Decision Suite
* Analyze Smoke test results from selenium, ant, and maven
* Schedule automation jobs on Hudson/Jenkins
* **Environment**: JMeter, JUnit, Java, Ad Insertion for IP TV

**Intel, Santa Clara, CA 09/2009-04/2010**

**Performance Automation,**

**Reported to : VP of Architecture, Moenes Iskarous**

* Benchmark EEMBC, coremark, grinderbench , graphics and 3DMarkMobile
* benchmarks on various platforms and analyze cpu performance, memory management and processor throughput
* Optimize and tune benchmarks for various C++ compilers (gcc and icc), firmware and BIOS upgrades
* **Environment**: Ubuntu, CentOS, Fedora, C/C++, gcc/icc , compilers, firmware, NVIDIA graphics drivers, LAMP, makefiles

**Sony PS3, Redwood City, CA 04/09 – 08/09**

**Test QA**

* testing of PS3 codec C++
* A/V Player Test Plan (audio/video)
* Testing for H.264 compliancy for Advanced Video Coding/H.264 Multi-View Video
* Decoder Core module in C++
* **Environment**: C/C++, UnitTest++, A/V Player, H.264, 3D Graphics, Crash Test Analysis

**MobiTV, Emeryville, CA 11/08 - 02/09**

**Mobile Test engineer**

* Test MobiTV, XMRadio, and mobiVJ apps on EDGE/GPRS, Palm OS, winMo,UMTS, HSDPA, and RIM devices for Audio/Video
* Java automation of testcases for mobiTalk and Lua protocols and NODE.JS using JUnit and
* Maven, Selenium, Jenkins
* **Environment**: wireless, iOS/Android smartphones, memcached, JUnit, Java, LAMP

**Tivo, San Jose, CA 04/08 – 11/08**

**Server Test Engineer**

Led project to test new design of Mediation Layer Server:

* SOAP/HTTP testing of MLS protocol and NODE.JS using Soap UI, TestNG
* Automation of MLS testcases with Java using TestNG
* Test server builds for FAST, perform mysql failover testing, linux high-availability
* (HA) testing, heartbeat configuration, binary log replication (BLR), DRBD and
* Set-top-box testing
* **Environment**: SoapUI, Java, ScientificAtlanta, LAMP

**Mellanox Technologies 10/07 – 03/08**

**Performance Engineer**

**Reported to : Director of Marketing, Gilad Shainer**

* Run HPC Benchmarks on large Linux Clusters and publish results
* Profile applications and decide where performance can be improved
* Comparative analysis between InfiniBand interconnect and GigE
* **Environment**: C/C++, compilers – gcc, icc, pgc, taucc, gigE, 10gigE, infiniband, L1/L2/L3, LAMP

**Contracting Assignments** – **QA and Test Automation from 2005 – 2007**

**Callidus Software (Quality Assurance Engineer) San Jose, CA**

* Black Box and white box test J2EE application on multiple platforms
* Install application with Oracle 9i, SQLServer, or db2
* Perform installations with JBoss, websphere, weblogic for TrueComp Manager
* **Environment**: J2EE, JBoss, WebSphere, WebLogic, Oracle, SQL Server

**Sharpcast (Quality Assurance Engineer) San Jose, CA**

* Black box and white box test File and Photo sharing application
* Write test plans and detailed test cases and review requirements
* **Environment**: Web Services, Smartphones, iOS/Android devices

**Audible Magic (Quality Assurance Engineer) San Jose, CA**

* Perform server testing, audible magic AMDB testing, and Proxy Server testing
* **Environment**: Proxy Servers , Load Balancing, Windows Servers, IIS

**Software Development Projects 2000 – 2005**

**IBM (Perl Developer – Test Tools Team) RTP, NC**

* Develop scripts to automate preloads and secure image distribution
* **Environment**: PXE, Perl, VBScript, LAMP, makefiles

**Nortel Networks (C++ Developer – Call Manager, Call Processing) RTP, NC**

* Write code to support Voice Over IP Features for Succession Network
* **Environment**: ATM, TCP/IP, VC++, ClearCase, LAMP, makefiles

**General Dynamics (GUI Developer – WAN Monitor Tool) RTP, NC**

* Write code for Wide Area Network Monitor (WAN Monitor)
* **Environment**: C/C++, LAMP, makefiles

**NCState University** (**Java Developer – ecommerce**) RTP, NC

* Java Automation for O3C.com online retail shopping site
* Research Assistant for java automation for testing search engine
* **Environment**: Java, J2EE, Sybase