

VENKATA DUGGIRALA

SENIOR / LEAD QA AUTOMATION ENGINEER | SDET | QUALITY ENGINEERING | AUTOMATION ARCHITECTURE | CI/CD | CLOUD & KUBERNETES

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PROFESSIONAL SUMMARY

Senior Quality Engineering and Automation leader with 20+ years of experience delivering business value through technical execution, automation strategy, CI/CD modernization, and cloud-native quality engineering. Brings broad domain experience across cybersecurity, cloud, payments, telecom, and semiconductor industries, with a proven ability to connect product quality to business outcomes. Quickly adapts to and adopts new technologies while guiding teams to strengthen engineering capabilities, improve productivity, and accelerate reliable delivery. Partners effectively with Engineering, Product, Sales, Support, and business stakeholders to align quality strategy with customer and organizational goals. Known for building collaborative, high-performing teams and driving improvements in automation, release confidence, engineering velocity, and product reliability.

CORE TECHNICAL SKILLS

Automation & Quality Engineering: Test Automation Architecture, pytest, BDD, UI Automation, API Automation, Pact Contract Testing, Microservices Testing, Integration Testing, End-to-End Testing, Regression Engineering, Performance & Load Testing, Scale Testing, Mobile Testing, Accessibility Testing, Test Strategy, Release Validation
CI/CD, DevOps & Cloud: Harness, Jenkins, CloudBees, Kubernetes, Azure, OpenStack, GitHub, Bitbucket, SonarQube Quality Gates, Snyk Vulnerability Scanning, Containerized Test Automation, Dynamic Test Environments, OVF, qcow2, vApp, Postman, insomnia.

Programming & Frameworks: Python, Selenium WebDriver, Playwright, REST Automation, Node.js, Mocha, JMeter, MongoDB, C++, Qt, Perl, Frank/Cucumber

Leadership & AI-Assisted Engineering: Automation Strategy, Architecture, Shift-Left Quality, DevSecOps, Technical Mentoring, Hiring, Cross-Functional Leadership, Customer Escalations, POC Support, Claude AI, Windsurf AI

PROFESSIONAL EXPERIENCE

PROOFPOINT | Senior QA Automation Engineer | Nov 2022 – Present

Sunnyvale, CA

- Provide technical leadership across Quality Engineering, Automation, DevOps, and Product teams, driving quality strategy, release readiness, and execution for cloud-native cybersecurity platforms.
- Provide technical leadership while remaining deeply hands-on, architecting and developing Python-based automation frameworks, CI/CD integrations, Kubernetes test solutions, API validation, and cloud-native quality engineering initiatives.
- Lead Agile delivery activities including sprint planning, backlog grooming, defect triage, dependency management, retrospectives, and release planning across cross-functional teams.
- Spearheaded CI/CD modernization, accelerating release cadence from monthly to weekly and twice-weekly deployments by integrating automated testing, SonarQube quality gates, and Snyk security scans into CloudBees and Harness pipelines.
- Architect and actively develop containerized automation frameworks for Kubernetes-based microservices using Python, pytest, Playwright, and Pact contract testing.
- Design and maintain automation solutions for REST APIs, integration testing, end-to-end testing, regression testing, and distributed cloud services.
- Mentor engineers on automation architecture, test strategy, quality engineering best practices, and resolution of complex development and production issues.
- Built a reusable pytest BDD framework that enabled Product, Support, and Engineering teams to contribute automated test scenarios and expand test coverage.
- Led global automation initiatives supporting multi-region deployments across India, Australia, Canada, and UAE with reliable validation and zero-downtime release confidence.
- Developed a centralized test reporting platform aggregating results from multiple frameworks into a unified engineering dashboard.
- Performed hands-on performance and scalability testing, identifying critical memory, reliability, and capacity bottlenecks prior to production releases.
- Drove engineering modernization initiatives including Bitbucket-to-GitHub migration, Jenkins-to-CloudBees transition, dependency upgrades, and vulnerability remediation.
- Validated cybersecurity capabilities including Threat Dashboards, Security Event Timelines, Investigation Maps, and real-time monitoring solutions while leveraging AI-assisted engineering tools to accelerate development and troubleshooting.

PULSE SECURE | Sr. Staff Software Test Engineer | Jun 2020 – Oct 2022

San Jose, CA

- Engineered CI/CD pipelines for test automation, improving execution efficiency and reducing test-cycle turnaround.
- Architected a unified master regression suite by integrating UI automation and service-level automation across multiple microservices.
- Customized automation frameworks for dynamic test environments and built a web server to host regression results for tracking and metrics.
- Designed scale tests and automated Zero Trust Access capabilities including certificate validation, certificate rotation, BYOC, and multi-tenancy.
- Created automation to optimize Azure QA/Dev environment utilization and automated Dev/QA cluster deployments using Kubernetes-based internal frameworks.
- Partnered with Sales and Support teams on technical POCs to accelerate customer evaluation and time to market.
- Performed Data Validation by comparing the API Response with data from DB (mariadb/mysql). Automated the data validation using python requests, mariadb and mysql-connector modules
- Actively participated as an Agile/Scrum team member in sprint planning, daily standups, backlog refinement, defect triage, retrospectives, and short release cycles, aligning automation and validation work with sprint goals and release timelines.

FORTINET | Manager, Software Development QA | Dec 2014 – Jun 2020

Sunnyvale, CA

- Defined architecture for high-performance, scalable systems using a security-first strategy and guided software performance improvement initiatives.
- Led cross-functional Agile delivery coordination by facilitating scrum ceremonies, sprint planning, backlog grooming, blocker triage, retrospectives, and release-validation discussions, improving execution visibility, dependency tracking, and release predictability.
- Architected reusable functional automation using Python and Selenium WebDriver and developed a data-driven Python REST API automation framework.
- Established Jenkins CI workflows and automated OVF deployment, build generation, OVF-to-qcow2 conversion, multi-VM vApp deployment, and OpenStack provisioning APIs.
- Developed Python automation for Ixia controllers, recommended product design improvements from performance findings, and directed engineering lab/infrastructure upgrades.
- Recruited and mentored engineers while partnering with Sales, Support, Account teams, and customers on demos, escalations, POCs, and product lifecycle execution.

PAYPAL | Senior Software Engineer | Oct 2013 – Dec 2014

San Jose, CA

- Implemented a Continuous Integration system for a Node.js-based web services team.
- Developed JMeter performance testing and Mocha-based unit/functional regression automation.
- Implemented Node.js and MongoDB web services for Merchant Analytics and automated mobile validation using a Frank/Cucumber-based framework.
- Coordinated localization and accessibility testing and supported production/pre-production deployments.
- Contributed as an Agile/Scrum team member in iterative delivery cycles, supporting sprint planning, daily standups, defect triage, short release cycles, CI validation, and retrospective-driven improvements.

Recognition: Craftsmanship Award; Spot Award

COLLABORATIVE SOLUTIONS | Software Quality Engineer | May 2013 – Sep 2013

San Jose, CA

- Supported PayPal Here merchant payment services, testing iPhone/iPad applications and automating functional scenarios using the Frank framework.
- Created test scenarios, test cases, and test plans and partnered with development teams on quality status and defect resolution.

DEUTSCHE TELEKOM HBS | QA Engineer | Mar 2011 – May 2013

Mountain View, CA

- Developed automation for e-commerce and billing systems and created JMeter automation for API validation and performance testing.
- Tested Android/iOS applications and validated BSS components supporting ChooChee products and recurring billing.

Recognition: Employee of the Month

EARLIER SOFTWARE & ENGINEERING EXPERIENCE

NXP SEMICONDUCTORS | Sr. Design Engineer | Sep 2007 – Nov 2008

Bangalore, India

- Characterized 45nm libraries and special I/O cells; built tools and Perl scripts to migrate TSMC library data into NXP internal flows and validate CAD standards.

ATRENTA | Sr. Software Engineer | Mar 2006 – Aug 2007

Noida, India

- Developed 1Team Genesis GUI capabilities and reusable Qt/C++ libraries for SoC schematic visualization.

TARAY TECHNOLOGIES | EDA Software Engineer | May 2004 – Apr 2006

Hyderabad, India

- Developed FPGA-based EDA software and tools across MIG007, Virtex-4, Spartan-3, Virtex-2, and Virtex-2 Pro technologies.

EDUCATION

Bachelor of Technology, Electronics & Communication Engineering — DVR College of Engineering / Jawaharlal Nehru Technological University | 2000–2004

CERTIFICATIONS & RECOGNITION

Certifications: Cybersecurity Foundations; Microservices Foundations; Learning the JavaScript Language; Blockchain Basics; Blockchain: Beyond the Basics

Awards: Craftsmanship Award (PayPal); Spot Award (PayPal); Employee of the Month (Deutsche Telekom HBS / ChooChee)