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| Rajesh Elumalai  Chennai, India  [rajeshkumar.elumalai@gmail.com](mailto:rajeshkumar.elumalai@gmail.com) | (+91) 98404-48495    Hello!  I’m Rajesh. I have a bachelor’s degree in Electronics and Communication and a MS degree in Software Systems.  I started out as an engineer doing RPA and quality assurance for Arbitron in early 2005. Around 2007 I moved to Symantec where I worked on a range of products from desktop applications, legacy self-hosted services to cloud native solutions. I have experience enhancing, maintaining and migrating services which have been in production for over 15 years.  I have gained experience in both the technical and management aspects of software delivery and service continuity. I have hands on implementation experience and experience in scoping, planning and tracking project deliverables.  I have experience working with applications hosted on private data centers and all the planning and coordination that goes into deploying and maintaining services there. In recent years, in line with the trends in large enterprises, I have gained experience with cloud hosted software and service providers like AWS and GCP. I was involved in the migration effort of moving all our email services from our data centers into the cloud.  I have attached a summary of my work experience for your perusal, I look forward to speaking to you.  Best Regards,  Rajesh.  [rajeshkumar.elumalai@gmail.com](mailto:rajeshkumar.elumalai@gmail.com) | +91 98404-48495    Rajesh Elumalai  Chennai, India  [rajeshkumar.elumalai@gmail.com](mailto:rajeshkumar.elumalai@gmail.com) | (+91) 98404-48495 | |
| SKILLSProgramming Languages and Environments Python, bash, Linux, Windows  **Tools**  JMeter, Gatling, Selenium, RobotFramework, postman, Burp Suite, WireMock, Fortify, Cenzic Hailstorm, Jenkins, ansible Application Security Threat modeling and Security testing, Static analysis  **Data management systems**  MariaDB, multi-master Galera-cluster with synchronous replication, Elasticsearch Distributed Systems and Cloud Services AWS cloud services (EC2, S3, lambda, route 53, ELB), Google Cloud Platform (compute engine, cloud storage, persistent disk, Epicycloid loadbalancing, cloud DNS, cloud Armor, cloud monitoring) Monitoring Grafana, Telegraf Technical Management Test planning & scheduling, Technical reviews, Defect Triage, Penetration test, Capacity planning, System upgrades and Migration, Training and Product demonstrations. PROJECTS Detailed information about projects in the following page. | EXPERIENCESYMANTEC CORPORATION *Chennai* 13 YEARS*Software QA Engineer 4 2018 – PRESENT* *Software QA Engineer 2015 – 2018**Senior QA Analyst* *2012-2015*   *QA Analyst 2009 – 2011* *Associate QA Analyst 2007 – 2009* Excelacom *Chennai* **2 YEARS**  ***Programmer Analyst*** *2005 – 2007* EDUCATIONM.S. Software Systems, (2007 - 2010)BITS Palani – Work Integrated Learning Program **B.E. Electronics and Communication**, (2001-2005) Meenakshi Sundararajan Eng. College |

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# PROJECTS

**SYMANTEC CORPORATION** (2007 - present)

1. **Symantec Email Quarantine *- us.quarantine.symantec.com***

Email quarantine infrastructure was designed as a collective of independent microservices handling 6 million quarantined emails/day, with capacity to spare. Designed a bottom-up component test strategy to implement automated functional tests using service virtualization and composition based on data flow method for integration tests. Implemented CI/CD build pipeline with ansible and RobotFramework for automated build deployment and end-to-end tests along with static and run time analysis.

Designed and implemented a fault injection script using Linux utilities and AWS System manager to validate the SLAs for availability (No Single Point Of Failure principle), data integrity in self hosted services (ElasticSearch, MariaDB) and workflows (Notification, Ingestion)

Characterized the workload, entry criteria and data generation strategy to define baseline, benchmarking, throughput and peak load test strategies for measuring performance via load, stress and soak test. Developed the performance test plan, estimated effort and set up a performance test rig using JMeter, Gatling, for data and load generation, Telegraf, a server agent for collecting metrics, Influx DB for storing the time series data and Grafana as the observability platform. Executed tests, analyzed, reported throughput and managed capacity planning with the operation team. Once the baseline was established, integrated the performance test automation into the CI/CD pipeline for nightly builds to track throughput and latency.

Planned and validated deployment procedures in per-production environments and managed the migration of live services into Amazon Web Services (AWS) and Google Cloud Platform (GCP) with minimal downtime, no data loss or performance degradation.

1. **Email Continuity and Archiving, Spam Manager and Image Analysis.**

Using Linux tools, implemented functional tests a cloud service for archiving customers weblog, Emails, IM logs for archival and compliance purposes. Proposed and implemented structural testing techniques to improve code quality, test coverage. Automated static analysis using coverity, Security audit and application security using Fortify, Test coverage using bullzeye and cobertura via CI/CD. Planned and Implemented automated performance test runs using JMeter.

1. **Norton products – Partner Engineering**

Implemented an automated test suite and certification process leveraging a VMware’s server virtualization (ESXi) for Norton Antivirus, Norton Internet Security and Norton 360 OEM and ISP partner layout. Recommended changes to the framework to include certification tests for Norton Boot Recovery Tool (NBRT), a clean boot solution in Windows Preinstallation Environment, and implemented them.

1. **Norton products *– StatusSDK***

StatusSDK is a set of APIs for the OEM and ISP partners to query the health, component status, and to trigger scan and other actions which are used in remote management, OOBE (Out Of Box Experience), custom widgets, and tiles on windows OS having Norton security products. Owned and implemented the automation of functional and certification tests, static and runtime analysis across Norton products.

**EXCELACOM** (2005 - 2007)

As a campus recruit implemented a PoC to showcase the viability of Robotic Process Automation and reduce the regression test cycle time, using WinRunner and QTP for Arbitron’s (now Nielsen Audio) sales proposal and analysis software. Designed a keyword based, data driven framework to automate the entire regression suite and implemented it at the client’s Maryland facility.

Proposed and implemented a User Lifecycle Management centered test strategy for the system integration and operational readiness certification of a Mobile Virtual Network Operator, Trumpet Mobile in the US, Puerto-Rico.