



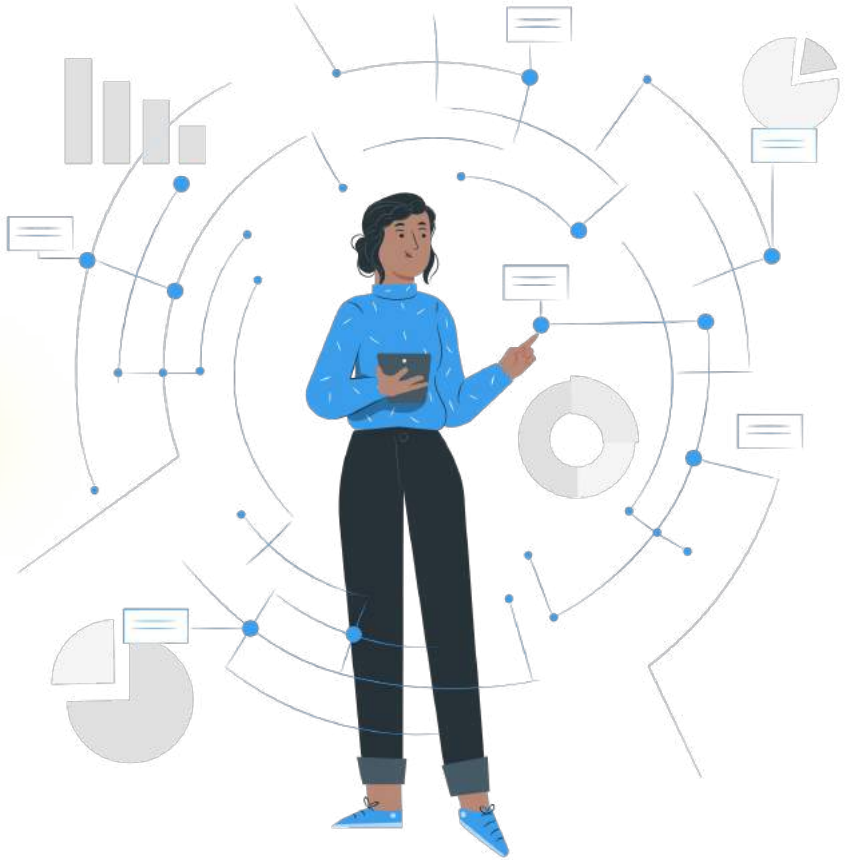
FRUGALTESTING

Your Trusted Testing and DevOps Partner



CONTENT

- Our Principles
- Industry Focus
- Our Clients
- Why Frugal Testing?
- Our Services
- Quality Assurance - Service Offerings
- How We Outshine Your Other Options
- Our Ecosystem
- Our Engagement Model
- Our Marketplace Tool Expertise
- Case Studies
- More About Us
- Testimonials
- Leadership
- Contact Us



OUR PRINCIPLES

VISION



To be one of the most admired global testing consulting companies delivering competitive advantages to our clients.

MISSION



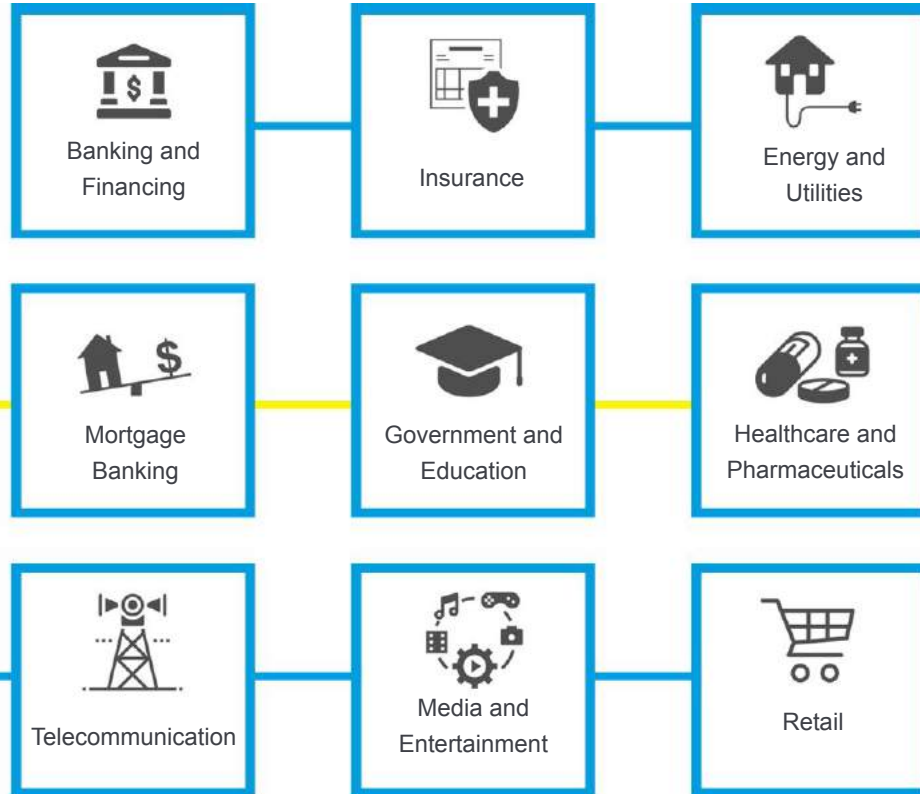
To be a trusted advisor and provider of high business value and technology solutions.

VALUE



To create competitive advantage for organizations around the world by implementing customized end to end IT Solutions.

INDUSTRY FOCUS



OUR CLIENTS



WHY FRUGAL TESTING?



CUSTOMER FOCUS

Emphasize on customer defined quality and service.



INTEGRATED SERVICES APPROACH

Reduce process errors & improve test effectiveness.



QA TECHNOLOGY

Equipped with latest and right set of testing tools.



FLEXIBILITY & COLLABORATION

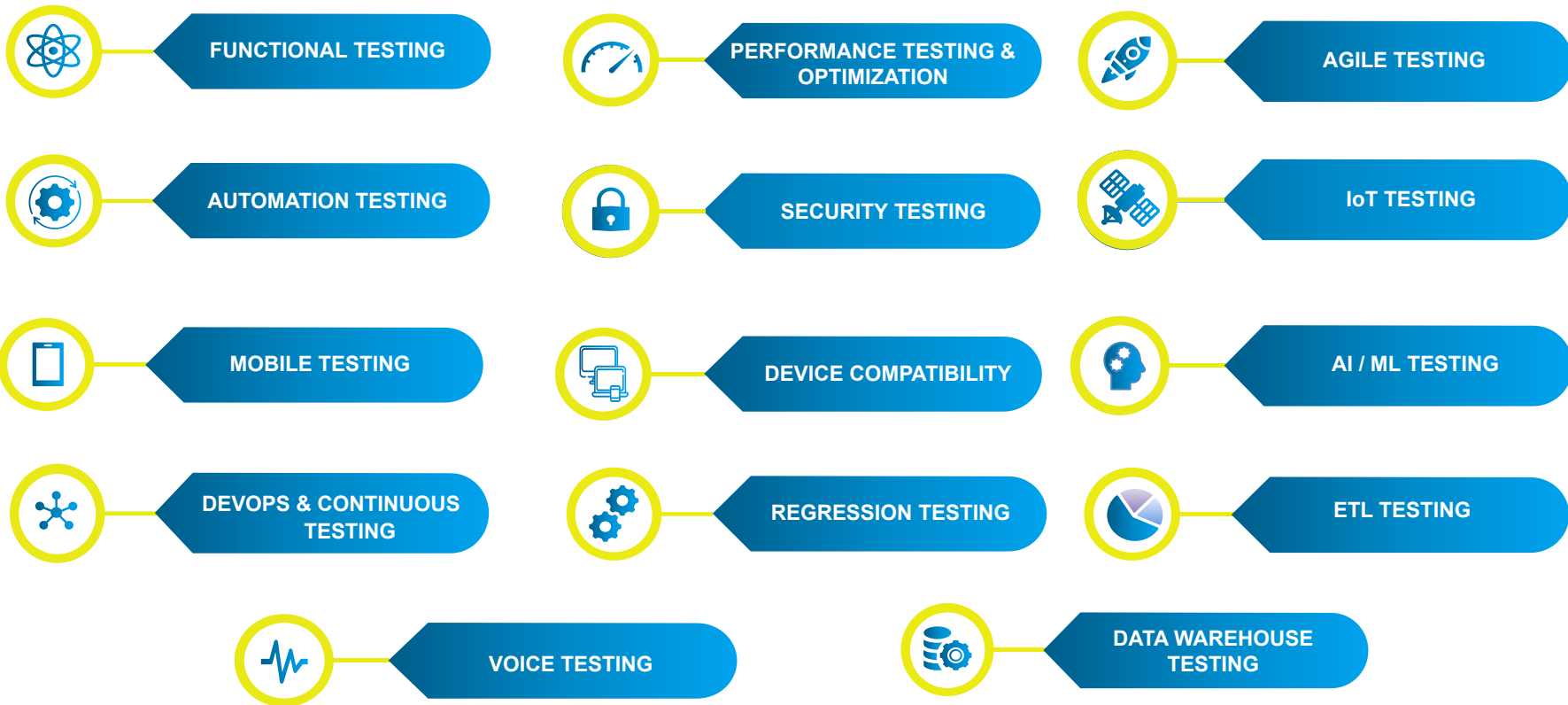
Flexible in terms of process, resource, operations and pricing.



PEOPLE & CULTURE

Promote innovation and accountability at all levels.

OUR SERVICES



QUALITY ASSURANCE – SERVICE OFFERINGS

Core QA Services

- Functional Testing
- Compatibility Testing
- Regression Testing
- System Testing
- Usability Testing
- User Acceptance Testing
- Installation Testing

Technology Transformation

- Test Automation
- Performance Testing
- Load Testing Mobile Test Automation
- Test Environment & Data Management
- Security Testing



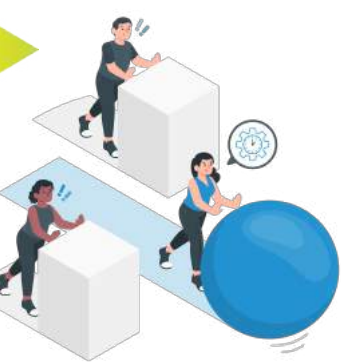
Specialized QA Services

- Cloud Testing
- Packaged Application Testing
- Mobile Testing
- API Testing Data Quality Validation
- Big Data Testing
- Database Testing
- IOT Testing

Testing Tools/ Framework

- Selenium, Appium, MSBuild, Maven, Yaml
- SoapUI, Restful API, Apache HTTP API
- TestNG, Junit, Nunit, MSTest, BDD Cucumber/ Specflow
- MS Test Manager, Telerik Test Studio
- Jenkins, Jira, JMeter, LoadRunner

HOW WE OUTSHINE YOUR OTHER OPTIONS?



		FREELANCERS	TRAINING AGENCIES	ONLINE COURSES
Quality of Services	Top notch quality services with high efforts	Varies based on individual's expertise and inconsistent efforts due to personal issues	Lack of testing process with limited efforts	Standardized training with self-paced efforts
Cost	Expensive because offers risk-free, high-quality services	Affordable but risky due to freelancer's personal circumstances	Affordable but limited to standardized training	Inexpensive but no personalized training
Operational Support	Extensive operational support with dedicated management escalation procedure	No operational support	Limited operational support	No operational support
Delivery	Predictable delivery - offering a combination of people, process and technology	Unpredictable delivery - focuses only on the people element	Limited to process and theoretical knowledge	Not guaranteed

HERE'S WHY WE ARE UNSTOPPABLE

At Frugal Testing, we deliver exceptional software testing services, focusing on accuracy and bug-free solutions.

- ✓ **Rigorous QA standards for superior software performance**
- ✓ **Custom QA solutions tailored to project specifications**
- ✓ **Leading expertise in comprehensive software testing**
- ✓ **Commitment to quality with every QA initiative**
- ✓ **Dependable results from detailed software test processes**



Cost of Untested Software

Los Angeles Times

CALIFORNIA

California COVID-19 vaccine rollout hit with software system problems

Cyber Security News

Home Threats Cyber Attack Vulnerability Zero-Day Data Breaches Cyber AI What Is Top 10

Home » Cyber Security News » Zoom Mobile and Desktop App Flaws Let Attackers Escalate Privileges

Cyber Security News Vulnerability

Zoom Mobile and Desktop App Flaws Let Attackers Escalate Privileges

The Seattle Times

Business

Newsletters Log In Subscribe

LOCAL BIZ NATION SPORTS ENTERTAINMENT LIFE HOMES OPINION | THE TICKET JOBS EXPLORE

All Sections

Boeing & Aerospace Amazon Real Estate Economy Microsoft Technology

Boeing & Aerospace Business International Trade Life Markets Nation Nation & World Retail Technology Travel World

Southwest Air briefly halts flights due to technology issue

April 18, 2023 at 8:06 am | Updated April 18, 2023 at 8:44 am

Forbes

FORBES > BUSINESS

BREAKING

Tesla Recalls More Than 2 Million Cars In U.S. To Fix Autopilot Flaw

WSJ PRO CYBERSECURITY

Home News Research Archive Newsletters Events

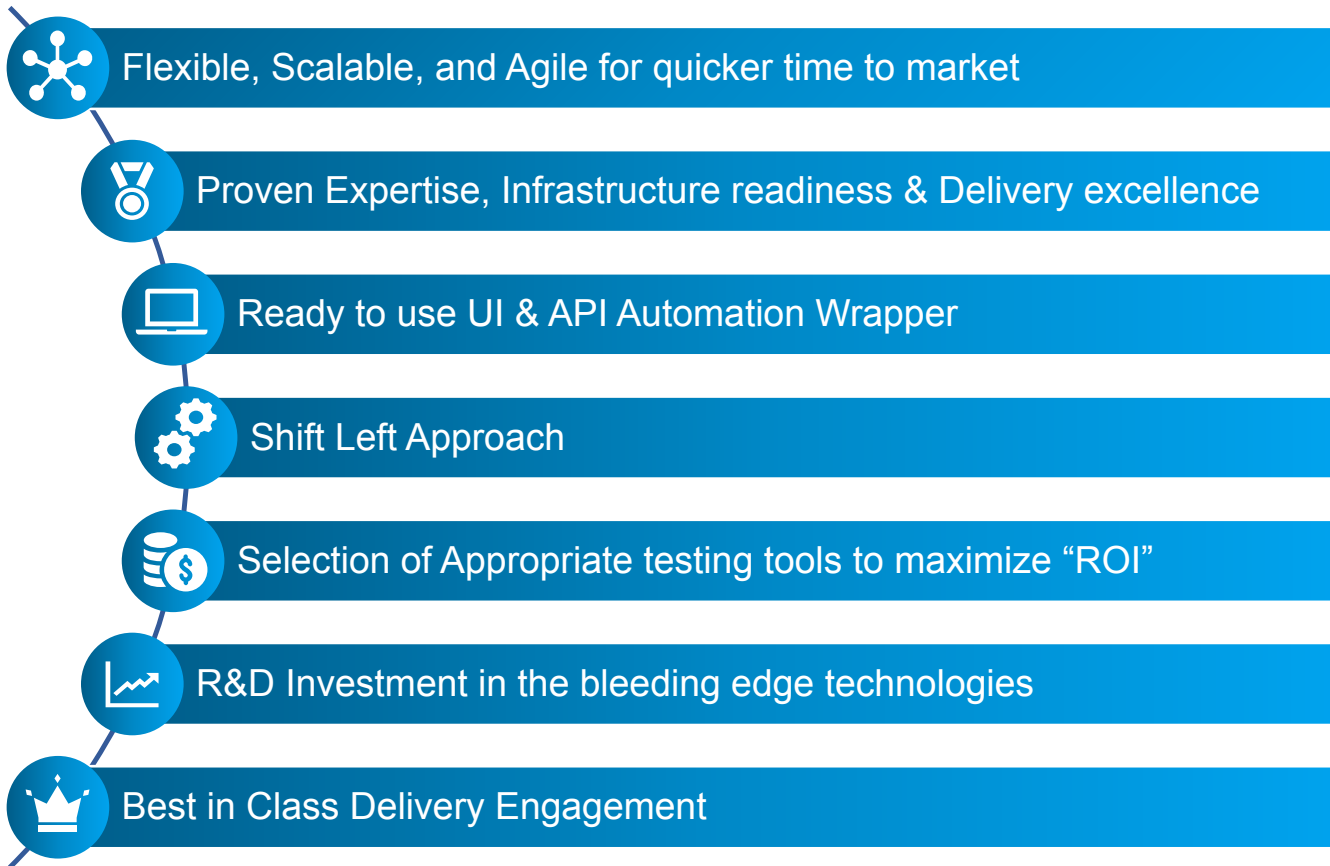
WSJ PRO

The Log4j Vulnerability: Millions of Attempts Made Per Hour to Exploit Software Flaw

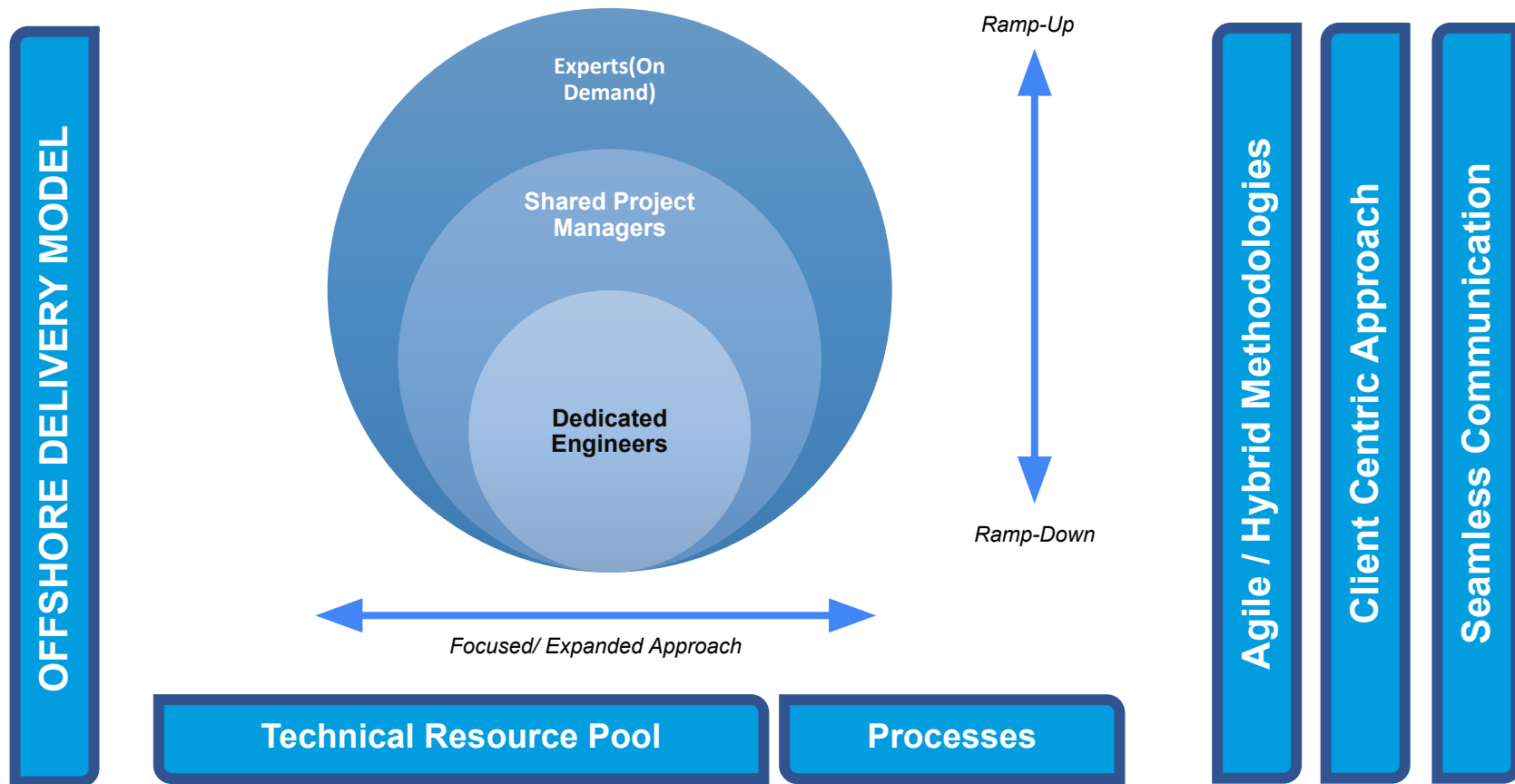
Hundreds of millions of devices are at risk, U.S. officials say; hackers could use the bug to steal data, install malware or take control



OUR ECOSYSTEM



OUR ENGAGEMENT MODEL



OUR MARKETPLACE TOOL EXPERTISE (but not limited to...)

Project Management

Report Management

Automation Testing

Performance Testing






















































Functional Testing

Mobile Testing

Locator Tools

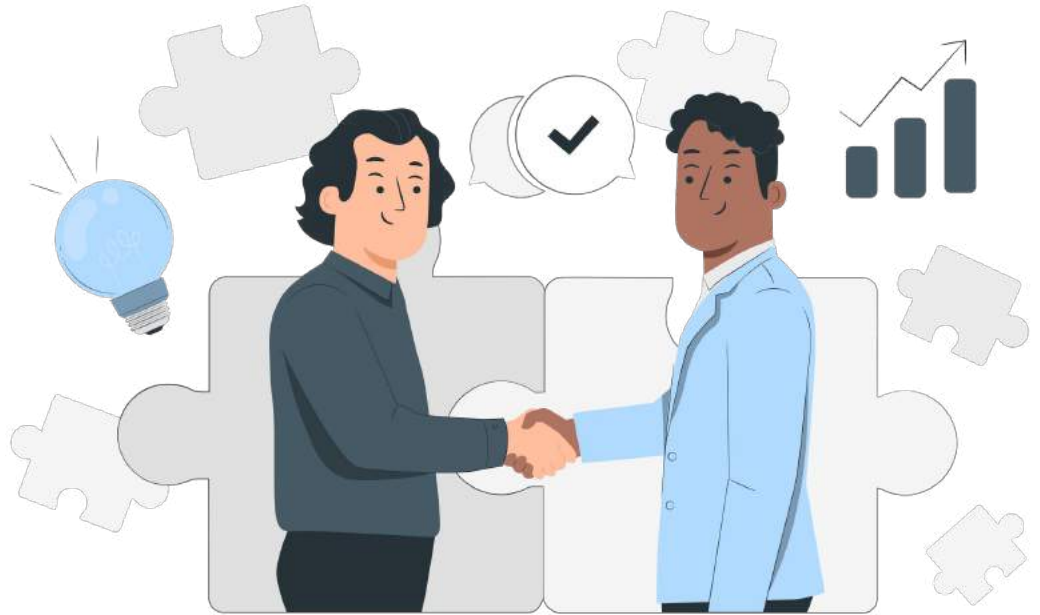
Repository Management

CI/CD Pipeline tools

 Jira	 Google Sheets	 Notion	 teamwork.	 Bugzilla	 Trello
 TestNG	 Allure	 cucumber	 Extent Reports	 TestRail	 pytest
 Se	 REST ASSURED	 Katalon	 WEBDRIVER	 cypress	 IntelliJ IDEA
 aws	 new relic	 LoadRunner	 APACHE JMeter	 NeoLoad	 Gatling
 Jira	 Trello	 mantis BUG TRACKER	 POSTMAN	 REDMINE	 TestRail
 appium	 Java	 Tricentis	 VBScript	 python	 Ruby Programming
 <XPath>	 Sp	 Selenium IDE	 watir	 NMAP	 WebDriverManager
 GitHub	 Jira	 XRAY	 Z-PHYR	 Flask	 Bitbucket
 Jenkins	 TestRail	 Travis CI	 TeamCity	 sonarqube	 circleci



CASE STUDIES



Functional testing to enhance the quality of the software of a global eSports platform

CLIENT OVERVIEW



A global sports and esports news website, founded in 2009.

HIGHLIGHTS



- 500+ test cases were created and executed for all the portals.



CUSTOMER SITUATION

- Seamless working of the Web application and Android app as per the functional requirement.
- All modules to be integrated as one wholesome project.
- Help to reduce the gap between the business organization and its users.
- Testing functional flow and behavior of different modules on Web & Mobile App.
- To ensure a bug-free experience in the application by pointing out bugs after rigorous testing.
- Admins should be able to add a new tagline, delete a tagline and view all active taglines
- The tag clouds on the desktop to come in a single line as it comes on mobile.
- The AMP article tag cloud should also behave the same way as it comes on the web.



OUR SOLUTION

- Gained in-depth knowledge of the app by working closely with the client and resolving multiple queries through daily and weekly status reports.
- Formulated detailed test cases by testing the functionality of the app in several scenarios and modules.
- Tested app on every platform and developed a summary dashboard detailing every defect found on different platforms.
- Recommend showing the date and time in the old format itself and by default should be in IST and should change as per the geo of the users. Example - If any users land on our article for the US we can show the date and time as per ET.
- This will solve both the issues, showing the correct date and time to users as per their location and also providing a clear date for crawlers so that they will pick the correct time.



CUSTOMER BENEFITS

- The team ascertained that the bugs have been fixed and no further issues are introduced due to these changes.
- The client's modules behaved accurately when integrated with other modules.
- The critical functionalities of the system worked well. This was done to identify all the blockers and show stoppers in the flow of the application.

How we helped a travel booking application deal with critical bugs.

CLIENT OVERVIEW



The client is an Indian leading online travel services provider with operations in India, the US, and the UK. Since their inception in 2006, they have provided the 'best in class customer experience on travel bookings to more than 7 million customers.

HIGHLIGHTS



- Provided the client with a document of errors and when they occurred.
- Provided detailed documentation of methods and their description.



CUSTOMER SITUATION

- Unstable and unpredictable UI, as features often disappeared and appeared later or sometimes didn't appear at all.
- Certain features and functionalities were not supported by automation testing scripts due to paper buttons.
- To test PWA and Mobile versions.
- Compatibility test on 15 different devices with varying OS.
- To detect and remove all the bugs before the commencement of the holiday season.
- Inconsistencies in critical sections like language, voice assistant, and payment sections lead to an unpleasant user experience.



OUR SOLUTION

- Our team performed a comprehensive review of the entire application to diagnose performance and functionality issues.
- Ensured consistency of features by testing the application on different devices and operating systems.
- Performed automation test of both mobile app and PWA application using an incremental and iterative approach to check various scenarios, trip types, and transactions.



CUSTOMER BENEFITS

- Provided the client with an automation testing script, eliminating the need for manual intervention every time a new feature is added.
- Identified and reported critical bugs in modules like voice assistant, language filter, payments, and flight booking.
- Comprehensive error analysis along with reports and documentation was provided, on each module that was tested.
- The wider range of devices available in Frugal inventory helped the client in efficient reviewing and understanding of the behavior of the application.

Framework Automation to Test POS Application Scalability

CLIENT OVERVIEW



The client is India's first self-ordering and self-checkout platform with an industry leading cloud-based, mobile POS system that substantially improves the billing and checkout process.

HIGHLIGHTS



- Parallel execution in multiple instances.
- Test runs for 50 concurrent users.
- Processing time comparison of 50 user runs with 2 user



CUSTOMER SITUATION

- The client required an automated framework that will deploy a scheduled run of 50 concurrent users, each performing 100 transactions on the server. Their concern was to monitor the real-time user experience so as to ensure the smooth functioning of the application under peak load. The client also expected a consolidated analysis report of all 50 concurrent users.



OUR SOLUTION

- Held conference calls with the client to understand the features and services offered by the application. Thus, identifying the key requirements of the project.
- Configured the Selenium Grid for Windows and developed Selenium scripts for automating the complete functionality of the application.
- Successfully handled all the exceptions and errors generated as part of the process.
- Developed a batch code to automate communication between the hub and the nodes. Also, compared 50 users run with 2 users run in terms of processing time for different functions.
- Generated a consolidated Extent Report of all 50 concurrent users.



CUSTOMER BENEFITS

- He client got to know the behavior of the application under load and the fixes needed for the application to withstand the load.
- The GUI-based Load testing provided an insight into the problems with the front end during real-time user interaction.
- Procured visual logs and error screenshots for enhanced understanding about the scope of errors and deep dive analysis.
- Numerous functional defects and issues that were affecting the application's performance were detected and brought to the client's notice.

Test Automation Framework for financial service

CLIENT OVERVIEW



An established services provider, offering comprehensive analytical solutions for clients in banking, insurance, and other financial services.

HIGHLIGHTS



- Ensure a bug-free experience for their application by pointing out bugs after rigorous testing.
- Automate the testing for upload and download data related to banking and finance.



CUSTOMER SITUATION

- Prepare an automation framework for validating all the functionality of different modules.
- Cover all the possible logical validation in the application.
- Create a well-defined framework to control the execution and access across the application developers.
- To validate all the application functionalities in a better and fast way.
- Required an automated way to cross-verify all the complex logical modules.
- Debug all the errors in the platform with respect to different user inputs.



OUR SOLUTION

- Our team developed a deep understanding of the application by thoroughly using the product, brainstorming, and asking questions on functional flows.
- Automated the testing process such that the client can test their application any number of times after every new deployment, without making any major change in the framework.
- Provided a detailed report, including graphs, screenshots, and customized logs for easy identification of bugs.
- Cross-browser compatibility testing to verify the platform on different browsers.
- After every automation run hosts the latest report for better accessibility.



CUSTOMER BENEFITS

- Early identification of bugs that might have caused havoc later.
- Rigorous testing of the application with the use of minimal resources and time.
- Uninterrupted and smooth business flow.
- Easily accessible reporting

Performance testing helps a US based EdTech firm for better user engagement

CLIENT OVERVIEW



A student centric learner engagement platform - acts as a learning community that provides an immersive experience.

HIGHLIGHTS



- Reduced costs, improved quality and helped accelerate time-to-market.



CUSTOMER SITUATION

- The client was worried about the increasing number of entities on the platform, and wanted to test it for scalability and performance bottlenecks.
- Repetitive requests & requests present - not required by the page.
- Heavy load time for some JavaScript files and loading again for each page.
- Images & fonts also taking time to load.
- Ajax calls for notifications, calendar, posts etc. taking time to load.



OUR SOLUTION

- Overall more than 20 tests were run. The whole exercise of test executions got broken down into - Browser side rendering and Full Load Tests.
- The scope of the engagement was to measure end to end response time for the website and also to look at the performance optimizations on the server side.
- After detailed tests at the planning stage, the following 4 test plan were finalized:
 - 1.Smoke test
 - 2.Load test
 - 3.Scalability Test
 - 4.Endurance Test



CUSTOMER BENEFITS

- Helped the client visualize the pain points and strain components, and were able to deliver comprehensive reports of issues to be addressed one-by-one and fixed.
- The comprehensive test coverage we provided, amplified the performance and functionality of the website that led to better user experience and engagement.

Performance testing Asia's Largest data center for more than 50K concurrent load.

CLIENT OVERVIEW



Asia's largest Rated 4 Datacenter and managed services provider and trusted advisor to over 3,500 Indian and world's leading organizations including 15 of the Fortune 100 Global Multinationals.

HIGHLIGHTS



- The load was generated using AWS EC2 (AWS Mumbai location only), as major users are based in India itself.



CUSTOMER SITUATION

- To measure, report, and provide tuning recommendations for 50k concurrent users load test run.
- Perform O/S, Web Server, and Database Monitoring.
- The post-run results provide information to the customer about the Swayam portal in the following areas: Performance under load, Capacity usage/limitations, Areas of improvement.
- Monitors were deployed in Web, Application, and Database servers prior to testing to log resource utilization by each of these servers. The Scripts were validated by performing mock runs.
- The users were tested under different scenarios.



OUR SOLUTION

- The testing cycles were conducted wherein scalability issues of the application were corrected and the current tests concluded with the sustainability of 50K concurrent user load.
- Several rounds of tests were conducted.
- The application was observed to ramp up to nearly 50k user load with considerably less no. of errors and the target production environment that was required to support 50K user loads arrived.
- The test results reported 50k user sustainability with acceptable resource utilization.
- The application was deployed on the staging environment which would mirror the production setup.



CUSTOMER BENEFITS

- The Average Response Time of a few APIs was higher than 2 secs. The heavy transactions are illustrated with graphs.
- The CPU of the 10 servers involved was less than 20%.
- The application is able to sustain 50K user load tests.
- Overall Minimal resource utilization was observed in all servers during the test run period.
- During the peak load time of test execution, when the application was being accessed externally loaded in an acceptable time frame.
- Statistics and graphs for metrics like CPU Usage, throughput, the response time of APIs, generated from JMeter and New Relic were shared with the client.

Performance testing safeguards leading JEE/NEET educator platform after crash

CLIENT OVERVIEW



First The client is a renowned live course provider for key competitions like JEE, NEET etc. With 6.5 million + subscribers on youtube and ever growing results, the client has gained a major foothold amongst industry leaders.

HIGHLIGHTS



- Me A total of **23 APIs** to be tested under the load test environment for the given scenario within a sharp deadline.
- **Recorded and designed** an efficient script to run the test **within a day**.
- Implemented **Distributed Testing framework**.



CUSTOMER SITUATION

- The client wanted to load test the website with **20,000 concurrent users**..
- A Comprehensive Live course taking environment was Load tested.
- The performance of the application over a huge load of unique users was monitored.
- Client required a detailed analysis of the website response to a huge number of concurrent users.



OUR SOLUTION

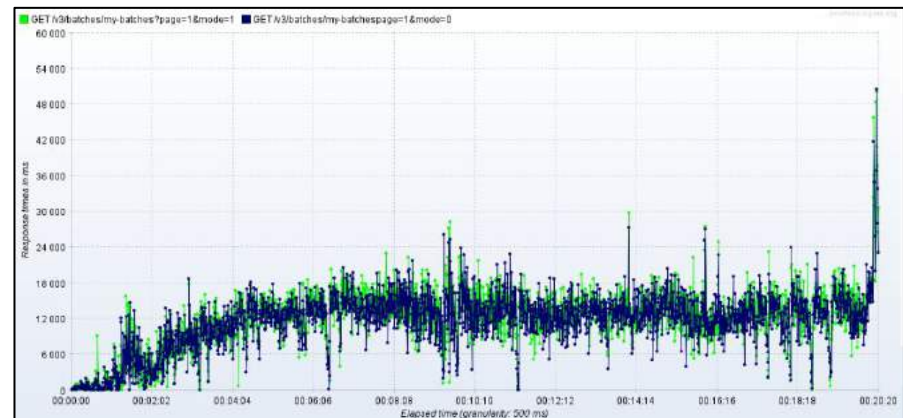
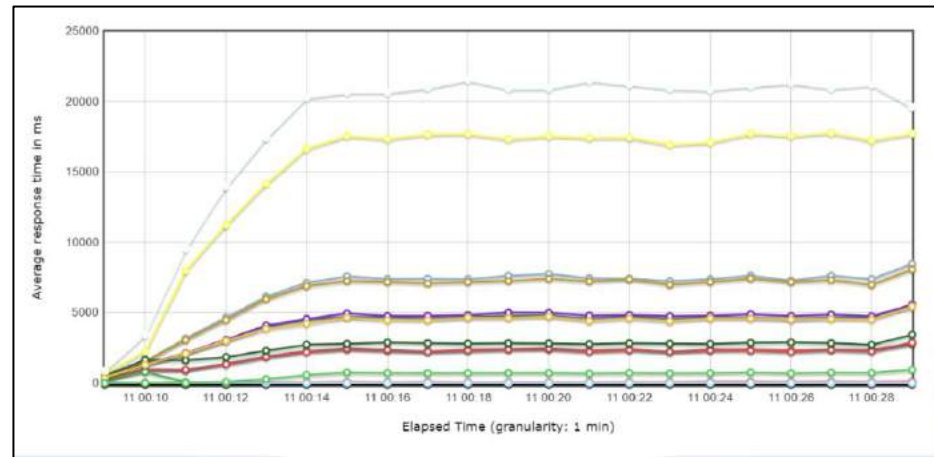
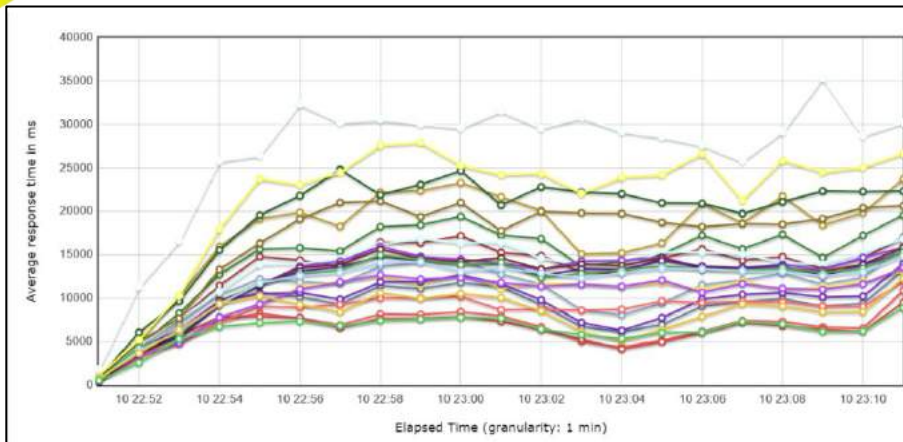
- Followed an **iterative approach** to run the load test first for 100 users, then 1000 and subsequently 20,000 users.
- Implemented distributed testing framework to run a huge Load Test.
- Identified **APIs with huge response time** and max failure rate.
- Monitored CPU usage, memory usage throughout the test duration.
- Ran 4 iterations of Load test for 20,000 users to **identify errors**.



CUSTOMER BENEFITS

- Extensive analysis and recommendations helped improve overall performance and scalability.
- Servers were stable and available/responded properly for consecutive hours' load testing up to 20,000 concurrent virtual users.
- Response time for a smaller number of users **grew sharply** for a higher number of users.
- Recommended the flow to reduce **error** from **60% to 2%** over 4 load test iterations.

Performance testing safeguards leading JEE/NEET educator platform after crash



BEFORE



AFTER

Performance testing helps a Singapore based bank to achieve 0.5sec response time

CLIENT OVERVIEW



A leading fintech company which provides stocks information to empower people to make smart investments.

HIGHLIGHTS



- Infrastructure was successfully examined to identify bottlenecks in CPU, storage and network.
- Thorough architect review identified 3 failure points which were then reworked to improve system performance.
- The app's server performance was analyzed to identify optimizations via threads, memory and connection pool management.



CUSTOMER SITUATION

- Scalability assessment and performance optimization of the web application.
- Smooth functioning for a concurrent load of 20000+ users.



OUR SOLUTION

- A review of vulnerabilities and recommendations to overcome them was submitted.
- Performance benchmarking was done to test IT infrastructure and its ability to handle several transactions without compromising on service.
- MySQL database was reviewed at the architecture, query instance and I/O level to improve performance.



CUSTOMER BENEFITS

- Response time of less than second helped client lower costs, save time and minimise effort.
- A simple code change helped website become 3 time faster.
- Implementing auto scaling at server level helped in handling peak user load effectively.

Performance testing helps fintech company respond within 1 second of 95% of transactions



BEFORE



AFTER

Redefined architectural compatibility and IoT functionality of a 3D Vision system

CLIENT OVERVIEW



The company uses patented optics and advanced imaging software to create cutting-edge 3D vision systems that solve complex visual challenges and provide effective solutions. These systems integrate robot optics and enable real-time analysis of scenarios with advanced 3D vision capabilities.

HIGHLIGHTS



- In a span of one month, we successfully tested a total of **18 modules**, **executing a comprehensive set of 978 test cases**.
- In just one day, we acquired a detailed understanding of GPIO and conducted thorough testing.



CUSTOMER SITUATION

- The client requested comprehensive functional testing of their tool stacks, including Explorer, ROS, and code samples. The role of the testing team is to create detailed test cases that ensure a thorough evaluation of functionality and performance across these tools.
- To ensure seamless interoperability among the **4** different types of vision products, the client sought to validate the compatibility and functionality of the software across various architectures. These architectures encompass **Nvidia's nx nano** and **AGX boards**, each operating different versions of **Jetpack**.



OUR SOLUTION

- To validate compatibility, test environments were established utilizing Nvidia's nx nano and AGX boards, each operating distinct versions of Jetpack. The software was executed on these architectures, and thorough compatibility testing was conducted to ensure seamless functioning, devoid of any errors or compatibility issues.
- Thorough functional testing was carried out on various hardware configurations, ensuring comprehensive coverage of all critical features and interactions tailored to the specific architectures. The testing process involved the creation of a comprehensive set of **978 test cases**, which meticulously addressed **18 critical modules** within the system.
- To ensure accurate people tracking, **GPIO**(General Purpose Input/Output) testing needs to be conducted on different **Avermedia boards** to verify the functionality of the people tracking API.



CUSTOMER BENEFITS

- Several major & unexpected issues were identified, which helped the client to optimize & focus on the working of the main features of the application.
- Compatibility testing on diverse hardware configurations provided the client with the assurance that their software functions seamlessly across various platforms and architectures. This approach helped eliminate compatibility issues and enhanced the overall user experience.
- In regards to the architecture, Explorer, and code samples, critical flaws were identified that had the potential to affect user experience.

Enhanced Customer Experience by Reducing Response Time by 50%

CLIENT OVERVIEW



A leading event discovery , listing, ticketing and promotion platform with multiple allied products.

HIGHLIGHTS



- 50% reduction in application response time and eventually quicker page loads and enhanced customer experience
- A good number of database related performance issues



CUSTOMER SITUATION

- To verify that all the business transactions meet their SLAs under predefined load and concurrency.
- To check application performance in with huge increase in data in DB.
- Finding out application bottlenecks before going live.
- To benchmark the infrastructure required for expected database volume.



OUR SOLUTION

- Performed load test with incremental and iterative approach with various user load to check various scenarios like image upload, newsfeed, directory etc.
- Monitoring the DB while performing test at query level.
- Ran the profiler tool to analyze the query time , unique query calls , total number of hits, read-write operations etc. occurring throughout the test.
- Helped the development team in recommending ways to fix error response codes and exceptions.



CUSTOMER BENEFITS

- Suggested to use cloud server and CDN to store images, videos instead of on-promise setup.
- To much indexing in DB queries which was leading to high response times.
- Identifying redundant which were impacting the performance of the application.
- The SQL server database's review at architecture, query ,instance and I/O level helped in performance improvement process.
- As a result most of the business scenarios responded to the SLA set.

Perfected Data Synchronization for a Water Intelligence Application

CLIENT OVERVIEW



A revolutionary water intelligence application to help businesses objectively evaluate water risks and digitally manage their water footprint including ground water extraction, water auditing, smart irrigation and domestic water usage.

HIGHLIGHTS



- Over **20 million rows** of data are managed in the Telemetry database.
- Separate tables for **shifts, daily, weekly, and monthly** intervals.
- Challenges are overcome in ensuring synchronization and calculation consistency across tables.
- Time savings were achieved by validating **720 rows** for a single device in just **1 hour**.
- Scalable solution accommodating up to **140,000 rows for 100 devices**.
- Consolidation of data from multiple tables into a **single framework**.
- Generic behavior is integrated into the **automation framework for all users**.



CUSTOMER SITUATION

- The customer is encountering challenges with their software product, particularly with the Telemetry database, which contains a vast amount of data with over **20 million rows**.
- Ensuring synchronization and consistency of calculations across these tables poses a challenge, as any discrepancies can lead to inaccurate insights and decisions based on the data.



OUR SOLUTION

- The automation framework implementation reduced the effort required for validating multiple rows of data for a single device from **1 day to just 1 hour**, showcasing the significant time-saving capability of automation over manual processes.
- Time and Effort Savings: Validating **720 rows** for a single device now takes significantly less time due to automation.
- Scalability: Designed the solution to handle large-scale data analysis, accommodating up to **140,000 rows** when validating data for **100 devices**.
- Utilized automated SQL queries in PGAdmin to consolidate data from separate tables representing **shifts, daily, weekly, and monthly** intervals in a single framework.
- Integrated into the automation framework, we created **3 queries to compare intervals with daily data**, generating summary tables for synchronization status, serving as a **generic behavior for every user**.
- Implementing our solution provided streamlined data validation, substantial time savings, and improved efficiency in monitoring data synchronization across multiple intervals and devices.



CUSTOMER BENEFITS

- Consolidated data analysis on a single sheet for multiple devices with distinct data sets.
- UI and database automation capabilities in the framework enabled comprehensive reporting.
- Generated consolidated reports for data synchronization, providing actionable insights.
- A streamlined approach saved time and effort for efficient analysis.
- Enabled the customer to gain valuable insights quickly and efficiently.

Payments made on Leading FinTech platform made secure through Application security testing

CLIENT OVERVIEW



A leading Dubai based Fin-Tech organization specializing in B2B transaction and Merchant based payment system

HIGHLIGHTS



- The transaction process is much more reliable and offers secure, fast B2B transactions.
- Security of The EMI based e-payment which is a secure and easy option for customers as it provides hassle-free EMI payment.



CUSTOMER SITUATION

- To enable a secure and fast online transaction
- To securely manage merchant based payment system.
- To maintain secure transactions through E-Wallet.
- To establish secure EMI based e-Payment.
- Implement strong password policies to avoid insecure password transmission and storage.
- Check the integrity of third party vendors



OUR SOLUTION

- Upon manual and automated analysis of the target, we found out that there are multiple vulnerabilities present on the payment gateway service, Merchant management system as well as a few third party vendor.
- Properly detailed reports were given along with the recommendation.
- Few other things to consider:
 - Perform proper VAPT assessment before deployment of new services.
 - Secure coding guidelines have to be followed.



CUSTOMER BENEFITS

- Upon manual and automated analysis of the target, we managed to find 3 critical, 9 high, 11 medium and 4 low severity issues.
- Our team have given a recommendation along with the proof of concepts of the vulnerabilities.
- Few highlightable findings:
 - Our security team have managed to find few business logic vulnerabilities that can cause a huge amount of financial loss and an attacker can be able to pay someone without paying the actual amount.
 - We have identified that few sensitive endpoints didn't have any proper access control mechanism and attackers can use those endpoints to gain bank details, user email, and other PII data.

Security assessment using Blockchain protects biotech biosphere clusters

CLIENT OVERVIEW



One of the most innovative startups based on blockchain technology where the motto is to create a platform to buy and protect natural biospheres.

HIGHLIGHTS



- Challenging and eco-friendly initiative
- Built with a complex blockchain mechanism where payment processes are fast and secure
- A user can buy, gift or sell real biosphere clusters



CUSTOMER SITUATION

- Data privacy and protection for ensuring sensitive data is accessible to the approved parties alone.
- Improper access control on sensitive endpoints was leaking the details of every active user.
- To test the integrity of authentication and authorization mechanisms.
- Analyzing the behaviour of the target audience
- Testing the security of the payment process
- Enumerating CVE based vulnerabilities automation scripts and implementing python
- Establishing more authentication and authorization mechanisms like multi-factor authentication



OUR SOLUTION

- Nmap used to scan the network structure and backend server
- Categorize data and assets being handled based on standard privacy requirements
- Standard HTTP request interceptor proxy was used to analyze the behaviour of the target
- Multiple vulnerabilities corrected on the payment gateway service, merchant management system and third-party vendors.
- Properly detailed reports and recommendations were shared
- Performed proper VAPT assessment before deployment of new services



CUSTOMER BENEFITS

- Upon manual and automated analysis of the target, managed to find 3 critical, 3 high, and 1 medium severity issue.
- Our team has given a recommendation along with the proof of concepts of the vulnerabilities.
- The team has managed to find a critical blind XSS(Cross-Site Scripting) vulnerability that can be used to take over the session cookie and even the account of the admin user.
- Superintendent to take over the business emails of the organization that can be used to send malicious emails to the users.

LEADERSHIP WITH 50+ YEARS OF EXPERTISE



Specialises in



SaaS and
Cloud



Strategy and
Innovation



Load
Testing

Bharti Garg 

Co-Founder & Chief Product Officer

Infosys

SAMSUNG

Honeywell



Specialises in



Business
Transformation



Performance
Engineering



Automation
Testing

Rupesh Garg 

Founder and Principal Architect

BANK OF AMERICA



Capgemini



BearingPoint

Our reputation through client's and employee's eyes



Check latest reviews »

frugaltesting.com

This site has obtained the following certificates:

Good rating

4.0 ★★★★★

98 Google reviews



Reviews credibility

Certified ▾

99% issue-free services

Certified ▾

Verified business

Certified ▾

Data protection

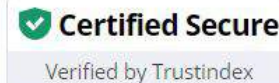
Certified ▾

About Trustindex certificate ▾

© Copyright 2023 trustindex.io



Top 4 Category Ratings



Featured on



Events



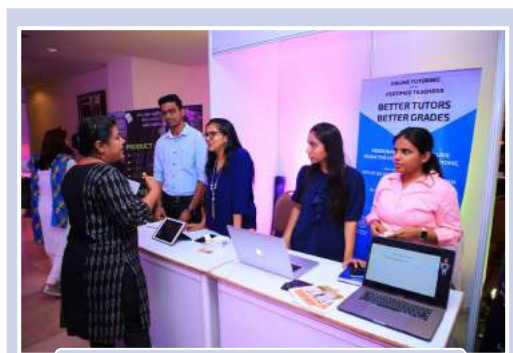
ICFAI



Symbi Talks



NASSCOM



WeHub



T-Hub



Big Pitch

GET A CLOSER LOOK AT US, TUNE INTO -



Zero Bug Revolution Podcast Series



The Art of being a LinkedIn Top Voice



How to make most out of your Internship



Team Diaries at Frugal Testing



Frugal Testing Introduction



[Why Performance Testing!](#)

AWARDS AND ACCOLADES

- Winner of the best pitch award in **Asia's largest Startup Festival**, 5th Edition of The August Fest, 2017
- Selected by WE HUB - **Women Entrepreneurship Hub** (India's first government-led incubator for women startups) as one of the top 26 startups amongst 290 applicants
- Addressed Management fraternity - **Symbiosis Institute of Business Management**, Hyderabad – August 2018
- Addressed Student community - **Oakridge International schools**, Hyderabad - Sept 2018
- Addressed Management fraternity - **Narsee Monjee Institute of Management Studies**, Hyderabad – Sept 2018
- Addressing Management fraternity - **Institute of Public Enterprise**, Hyderabad – Oct 2018
- Addressing Management fraternity – **Amity University, Calcutta** - Oct 2018



HERE'S WHY WE ARE UNSTOPPABLE



“A good value-add to our product development effort”

- Head of Technology



“Commendable attention to detail”

- Co-Founder



“Helped us to fine tune our infrastructure”

- Co-Founder



“Flexible and purpose oriented”

- Head, Product Development



“Their work radiated excellence”

- Product & Engineering Leadership



“Their organizational capability at the back end helped us progress”

- Founder



“The team has been technically astute”

- Director of Customer Success



“Good team, flexible to meet the timelines and reporting was adequately done”

- Co-Founder

MORE ABOUT US



We also provide

- Test Automation Advisory
- Test Data Management
- General Test Consulting
- DevOps Transformation
- Performance Test Advisory
- Test Tool Advisory



We work with

- Startups
- Fortune 500 companies
- Small and Medium-sized Enterprises (SMEs)
- MNCs



Partnered with the best



Azure



appium



new relic



REST ASSURED



NeoLoad



Jenkins



APPDYNAMICS



FRUGALTESTING

CONTACT US



+91-9160492537



info@frugaltesting.com



www.frugaltesting.com

