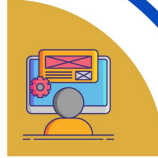# TOP 10 TRENDS IN SOFTWARE TESTING SOLUTIONS

SMART TESTING

Test early, test often! The 'shift left' approach is only going to get more popular with service virtualization to test code even before it is developed. Add automation to that and voila! Smart Testing is here to stay for a long time.
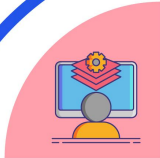
DEVOPS

At the intersection of Development and Operations is Quality Engineering. Testing is an integral part of DevOps thinking and it is Continuous Testing that makes Continuous Integration/Continuous Delivery possible.

AI/ML

Artificial Intelligence/Machine Learning (AI/ML) are not newcomers to testing. However new advances in algorithms, predictive models, and analytics are paving the way for new opportunities to apply AI/ML, from test cases to test coverage, from scripts to reports.

RPA

With AI/ML reinventing the testing arena, the next big thing is Robotic Process Automation (RPA) or software robotics. Automate repetitive tasks, execute business processes, and emulate human interactions using a software robot — the future is here.

AGILE

Dynamic development scenarios call for dynamic responses — in other words Agile. With self-organizing teams, iterative testing, and collaborative development, Agile testing combines the need for speed and with the need for quality — at the same time.

TEST AUTOMATION

Automated Testing is increasingly replacing manual testing for regression and other repetitive tasks. With testing tools like Selenium and TestComplete, to name just a couple, Test Automation is definitely on the growth path.

API TESTING

With an uptick in Cloud-based services, there is a critical requirement for API Testing, especially for web services. With APIs being used across thousands, if not millions of applications, API Testing enables testing of services independently of the applications that use them.
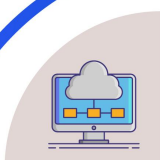
MOBILE TEST AUTOMATION

The exponential growth of mobile applications inevitably leads to a demand for expedited testing via automated testing tools. Mobile-oriented tools such as Kobiton and Katalon bring the much needed speed-to-market to the mobile application testing arena.

BIG DATA TESTING

As we all know, Big Data is here to stay in every field from technology, healthcare, banking to retail, telecom, and media. So how can Big Data testing be far behind? It is due for explosive growth in line with the capability to manage huge data volumes and disparate data types, enabling better decision-making and market strategization.

IOT TESTING

While everything from refrigerators to light bulbs go online, every single device also needs to be tested for reliability, security, performance, and user experience, among others. Naturally, the amount of IoT Testing is overwhelming, considering the diversity of protocols and operating systems across literally billions of devices today.

ZUCi SYSTEMS