

For effective clinical collaboration across a hospital or health system’s roles, departments and facilities, the collaboration software application must work seamlessly and reliably. To ensure the clinical collaboration platform’s quality, ongoing software testing is crucial. If the application does not function as needed or expected, it affects not only the user experience, but, more importantly, patient care.

In-depth testing of a software application continually occurs behind the scenes, while clinicians use the solution to coordinate patient care. New product features and enhancements are thoroughly tested to ensure they work as expected and don’t create problems with existing features. New features are tested against a wide range of operating systems and devices – iPhones, Android and web browsers.

How is this large volume of testing accomplished? Through automation.

### THE PITFALLS OF MANUAL TESTING

Without automation, software testing is time-consuming, labor-intensive, expensive and prone to human error. Manual software testing is performed by a human sitting in front of a computer carefully going through application screens, trying various usage and input combinations, comparing results to expected behavior and recording their observations.

Exhaustive testing is nearly impossible with manual testing processes. Further, the possibility of something slipping through the cracks and potentially causing patient harm is a very real concern, even with the best manual processes and most diligent test engineers.

Similar to the assembly line introduced during the industrial revolution, machines take over the repetitive and monotonous tasks that once could only be conducted by humans. When it comes to testing software applications quickly, accurately and reliably, automated processes can’t be beat.

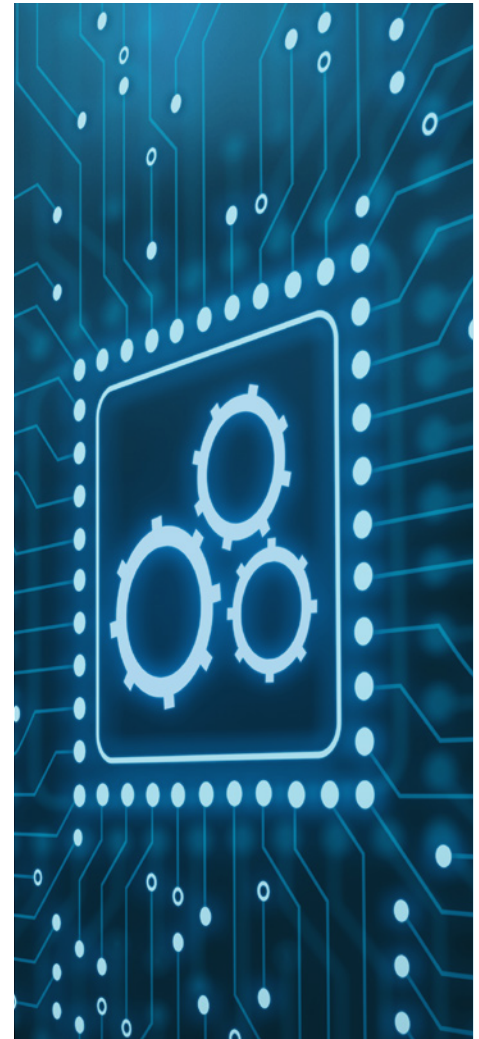
### THE VALUE OF AUTOMATED SOFTWARE TESTING IN HEALTHCARE

Automated software testing becomes all the more vital in the healthcare environment where patient safety and privacy are at stake. Software applications in healthcare must be secure, efficient and capable of handling large quantities of data. They must also remain HIPAA compliant.

Besides providing accuracy and reliability, test automation also delivers other benefits for healthcare organizations:

- Speeds delivery time of new software features
- Validates and optimizes a feature’s accuracy and performance
- Provides repeatability of test scenarios in every release
- Allows for increased depth and scope of tests
- Detects problems at an early stage, before the application is released to customers

When it comes to clinical collaboration solutions, security of patient data, fast turnaround time and flawless performance are essential. At Halo Communications, automated software testing is a critical component to delivering a high-quality clinical collaboration platform to our customers.



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As Automation Engineer, Sai is responsible for the continuous delivery and integration of Halo by creating, executing and maintaining automated test framework for Halo-iOS, Android devices and Halo-Web. He takes pride in being a part of the Halo team which is revolutionizing health care.