



Founded in 2016, Avitas Systems is a GE venture advancing inspection and engineering services through robotics, predictive data analytics, and artificial intelligence (AI) to improve safety, reduce asset downtime, and decrease overall inspection time by up to 30% over traditional manual methods. Avitas Systems's solutions provide advanced, autonomous inspection and asset management, as well as a cloud-based platform that fuses, analyzes, and stores comprehensive inspection and asset data with risk-based findings and recommendations presented visually online through dashboards.

Avitas Systems uses state-of-the-art robotics equipped with an array of advanced sensors, including RGB, infrared, laser-based, and ultrasonic, to collect data. Using autonomy to control the path of drones and the operation of the sensor kit, enables repeatable measurements for the AI platform to detect changes over time, as well as automated defect and asset recognition. The Avitas Systems Platform is built to learn as more data is ingested across diverse sources, leading to smarter, risk-based inspection findings.

Avitas Systems offers customized solutions including automated inspections, asset management, and risk-based decision making.

- > **Automated Inspection:** Avitas Systems has proven experience performing automated and remotely monitored inspections for industrial infrastructure by integrating cameras and sensors, including RGB, IR, and LiDAR, with autonomous aerial and crawling robots. This suite of advanced inspection platforms offers repeatable visual inspection, automated change detection, and automated defect recognition. When used in combination with our deep learning system, the full inspection process is automated including data acquisition, data analysis, recommendation generation, data visualization, and reporting.
- > **Asset Management:** Avitas Systems offers 3D photogrammetric models of assets through UAV data collection equipped with high-definition RGB imagery sensors. Spatial information and measurement capability of 3D asset models with point-and-click functionality support planning of follow-up inspections and maintenance activities.
- > **Risk-Based Decision Making:** This is enabled by utilizing advanced analytics and AI/deep learning combined with fused data from system operations, weather conditions, and asset inspection to optimize maintenance and inspection schedules. Predictive analytics, probability of failure, and recommendations balance cost savings against potential consequences of actions.

With the agility of a start-up but supported by GE, Avitas Systems has over 60 employees, with offices in Boston, MA, Houston, TX, and, San Ramon, CA.