

ARADISS

Adaptive Real-Time Anomaly Detection & Identification for Sensored Systems

ARADISS is a rapidly deployable anomaly detection technology that can predict failures in satellite systems. It detects even subtle anomalies and identifies their root causes using machine learning and graph techniques. This technology is agnostic of the platform, mission, and failure mechanism, and requires minimal subject matter expertise.

The detection thresholds are self-adjusting to gradual system changes allowing for highly accurate diagnostics. ARADISS is a cost effective fault management solution for custom satellites and can help minimize system down time.

Capabilities:

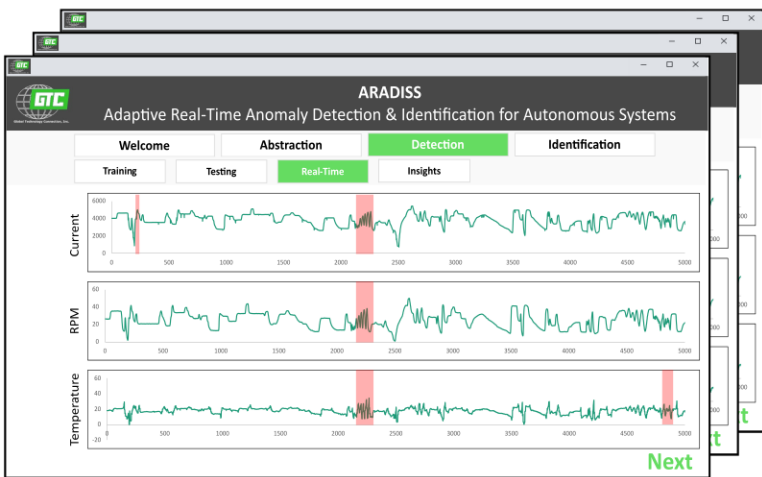
- Detect system anomalies such as:
 - Sensor and component faults
 - Software bugs and cyber threats
 - Environmental disturbance
- Information and data assurance
- Root cause identification

Applications:

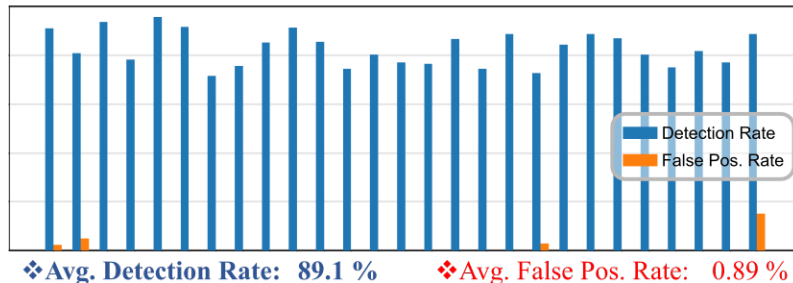
- Space systems - satellites and robotic systems
- Unmanned aerial, ground, and underwater vehicles
- Other cyber-physical systems such as automobiles

Benefits:

- Cheaper, faster, and transparent fault management
- Comprehensive and robust fault coverage
- Rapid and automated adaptation to new platforms
- Low computational overhead
- On-board or off-board deployment
- Increased autonomy and mission quality
- Second-line-of-defense for risk-averse missions

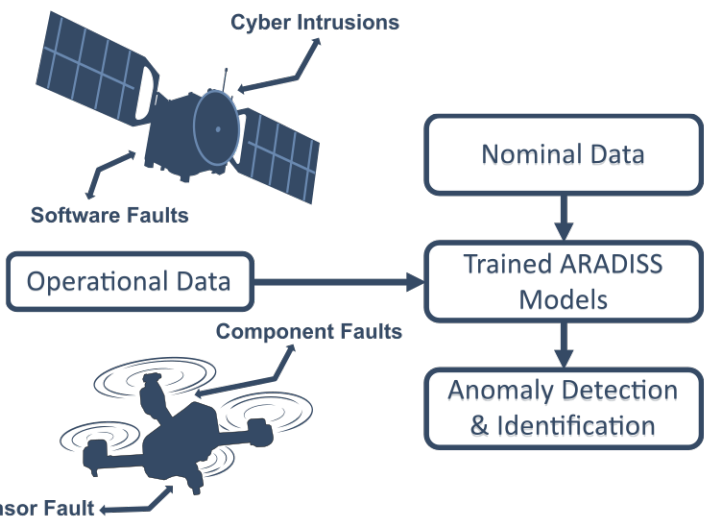


Anomaly Detection Results on Satellite Testbed



Variables monitored include:

Temperature, Voltage, Current, Power, Attitude, etc.



Contact Information

✉ jrao@gtcanalytics.com

🌐 www.gtcanalytics.com

Company Information

☎ (770) 803-3001

📍 2839 Paces Ferry Rd
Suite 1160
Atlanta, GA 30339

