

Transitioning Ideas from Concept to Reality

RAM Laboratories was formed to bring technologies out of the laboratory into the real world.

Our initial endeavors applied modeling and simulation technologies to next-generation avionics. We have evolved to address challenges in the fields of advanced analytics, cyber security, mobile devices and networks.



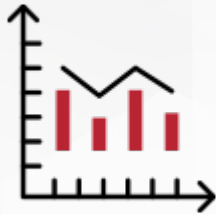
Established Trusted Business

Since 1997, we have provided services and technologies to commercial partners and major programs and agencies in the Department of Defense and Department of Homeland Security.

RAM Laboratories is a registered small business, headquartered in San Diego, California and holds an active facility clearance.

CAPABILITIES

From battlespace to cyberspace, we apply research to innovate and invent advanced solutions in the areas of:



ADVANCED ANALYTICS

Turning your data into knowledge through the use of artificial intelligence and modeling and simulation



MOBILE DEVICES & NETWORKS

Secure and efficient communications anywhere, anytime



CYBER SECURITY

Thwart and respond to threats and dangers that permeate the full spectrum of cyber

CYBER SECURITY

We thwart and respond to threats and dangers that permeate the full spectrum of cyber. RAM Laboratories' solutions have secured:

- **Commercial handheld and embedded devices**
 - Prevent attacks against zero-day vulnerabilities
 - Thwart data leakage
 - Isolate critical applications and data in separate personas/enclaves
- **Supply chain of COTS software**
 - Architect machine learning solutions that verify provenance of underlying COTS and open source libraries
- **Cyber Physical Systems and IoT**
 - Provide discovery, interrogation and continuous monitoring of the assets on one's Operational Technology network
- **Privacy of users, their data and their transactions**
 - Protect and secure sensitive information via advanced Identity-based encryption schemes
 - Design Blockchain solutions to ensure privacy and anonymity

MOBILE DEVICES AND NETWORKS

We ensure secure and efficient communications anywhere, anytime

- **Network Modeling and Simulation**
 - **Analysis** via trade studies and analysis of alternatives to drive engineering solutions
 - **Simulations** via tools, simulation infrastructure, data modeling, district event simulation, Monte Carlo analysis
 - **Modeling** of cyber attacks on enterprise and tactical networks
- **Secure Information Sharing**
 - Enables users on mobile ad hoc networks to receive data based on their interests while providing resiliency as nodes join and disconnect
 - Allows users and groups to be authenticated based on their attributes to improve authentication efficiency, scalability and key revocation

ADVANCED ANALYTICS

We turn your data into knowledge through the use of artificial intelligence and machine learning

- **Advanced Deep Learning and Neural Networks**
 - Anomaly detection of network and telemetry data
 - Automating detection, object recognition and classification
 - Image analysis and edge detection
- **AI at the Edge**
 - Providing reduced complexity, low-power solutions that can be realized in hardware for tactical use
 - IoT, CPS, SCADA and sensor analytics
- **Natural Language Processing**
 - Social media and sentiment analysis for Intel
 - Automated source code vulnerability detection and repair
 - Language translation