**ARTIFICIAL INTELLIGENCE SOLUTIONS**

Unlike market competitors Arcarithm's advanced data processing pipeline provides very large volumes of physical and synthetically generated training data that can improve model performance, to a degree not possible with publicly available image data sets.

- **Video Analytics (Computer Vision)**
  Real time and post processing Detection/Identification of Guns, Manned and Unmanned Aircraft, Commercial and Military Vehicles, Humans
- **Decision Support**
- **Customer Relationship Management**
- **Condition Based Maintenance**
- **Physical and Synthetic Data Creation and Augmentation**
- **Edge and Ruggedized Computers/Sensors**

“Your solution is more advanced than anything we have seen.” – A.Y., Senior Software Analyst PD CRAM, PEO Missiles and Space

“Arcarithm’s data pipeline innovation enables product leaders to accelerate time to production / time to value.” – Gartner, Global Research and Advisory Company

**TECHNICAL SERVICES SOLUTIONS**

Arcarithm has a superior advanced capability to identify and solve problems much faster than competitive approaches. We are quick to adopt new tools and techniques, with the ability to create innovative solutions where existing methods fall short. Arcarithm delivers a unique approach to the systems engineering process, resulting in greater mission success with higher quality solutions at a lower risk.

- **Full Stack Software Development**
  Microservices, MOSA, Front End, Persistent Layer, Software Modernization, SAFe Agile, Model-Based Systems Engineering, Data Engineering
- **Software IV&V**
  Static, Dynamic, Process Optimization/Automation, Lab Design and Development
- **DevSecOps**
- **Modeling and Simulation**
  Common Digital Simulation Integration Framework, Common Modeling and Simulation Environment, Model Synchronization, Model Federation, Architecture, Data Sharing Methodologies, Big Data, Scaleability, Low Bandwidth, Modeling and Simulation Applications, Federated Simulations, Big Data Analytics using Artificial Intelligence, 3D Rendering, Holographic Display, Application Interface For FOLD, Heterogeneous Display Environments, AEGIS Display System

“We don’t have to tell the Arcarithm’s team what to do, they tell us what will work. We expected to find 9 critical issues over the life of the project, the Arcarithm’s team found 27 in the first two weeks.”

– J.C., US Army

**COMMAND AND CONTROL SOLUTIONS**

Arcarithm offers unique expertise in developing optimization and artificial intelligence algorithms. Our algorithm development process leverages decades of experience with multiple complex systems at all levels. Our solutions are proven, fielded and working optimally.

- **Battle Management**
- **Sensor Management**
- **Fire Control**
- **Planner – Course of Action Recommender/AoA**
- **Human/Machine Interface – 2D and 3D (Augmented/Virtual Reality)**
- **Big Data Analytics and Management Frameworks**
- **Energy Management**

“Arcarithm’s Ominis product provides strong features that benefit event pre-execution/planning, integration, execution, and post-run analysis.” – Lockheed Martin MASC-F Team

“You guys understand the problem better than anyone we have seen.” – M.S., US Navy

“Arcarithm has been by far our easiest integration effort. They have remained flexible and capable of all requirements and changes given to them.” – T.N., US Army Contractor Technical Lead

DFARS 252.204-7012 Compliant

DUNS Number: 078491477 • CAGE Code: 6s1z4

NAICS Codes: 541715 primary, 541330, 541511, 541512, 541513, 541519