rogrammed response llc.
Email: Daniel.lowery@pre-us.com
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HUNTSVILLE: 2102 Triana Blvd. Huntsville, AL 35805

CAPABILITY STATEMENT

ABOUT PROGRAMMED RESPONSE

PR is a Warfighter-Centric, Customer-Focused, woman-owned small business. We help our customers engage in a broad range of projects aimed at enhancing mission effectiveness and addressing technological challenges.

These include:

- a proof of concept, model, or process, including a business process; reverse engineering to address obsolescence;
- a pilot or novel application of commercial technologies for defense purposes;
 agile development activity;
- the creation, design, development and demonstration of operational utility;
- · or any combination of these.

We use modern methods such as agile systems and software development, digital engineering, and model-based systems engineering using a modular-based open systems approach.

CORE COMPETENCIES



Digital/Systems Engineering



Software Engineering/App Development



DevSecOps/MLOps



Modeling & Simulation



Artificial Intelligence/Machine Learning

CODES & CERTIFICATIONS

- SBA Certified Economically Disadvantaged Woman Owned Small Business
- WBENC Certified

NAICS CODES: *541511*, 541330,

541990, 541715

DUNS NUMBER: 038996662

CAGE CODE: 7Z0Q4

UEI: SPZGRUT76J86

PAST PERFORMANCE

Designed, Architected, and Developed MOSA-alligned mission planning software for SDA.

Anchored orbital simulation model to STK to reduce dependency on 100K/yr license

FEATURED CLIENTS

- Space Development Agency
- Missile Defense Agency
- T2S
- SIXGEN
- Aeronix









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CAPABILITIES/PAST PERFORMANCE

Software Engineering

- Capabilities
 - Software System Integration/Architecture/Development (Full-Stack SW Development)
 - DevOps and CI/CD: Gitlab, Pipeline Design, Docker, Kubernetes, Ansible, Terraform
 - Software Development: C, C++, Java, Scala, Python, Javascript, Typescript, Swift, LabVIEW, MATLAB, Simulink
 - Deployment Environments: PR Cloud, Local, AWS Govcloud, Azure Gov
- · Past Performance Breaker (SDA)
 - Designed, Architected and Developed the MOSA based solution
 - Horizontally and Vertically scalable microservices architecture to support future capabilities
 - Frontend, Backend, and Database design and implementation orchestrated using Docker Compose for deployment to Dev, QA, and Production locally and in Azure Gov

Systems and Digital Engineering

- Capabilities
 - Digital Transformation Software Architecture
 - CM/DM (Configuration Management/Data Management)
 - MBSE (Model-Based Systems Engineering)
 - DOORS, Cameo, Cameo Teamwork Cloud, DOORS Next
- Past Performance Breaker (SDA)
 - Stood up MBSE Environment using Cameo Teamwork Cloud, Cameo in Azure Gov
 - Migrated requirements from DOORS to Cameo, managed change process
 - Implemented MBSE representation of Breaker and instituted use of Cameo Collaborator for review

Modeling & Simulation

- Capabilities
 - Data Analysis
 - · Process Automation
 - Quality Assurance and Testing
- Past Performance Breaker (SDA)
 - Created STK anchored orbital and ground interaction analysis model for simulated mission planning replacing the need for 100K/yr license

AI/ML

- Capabilities
 - Retrieval Augmented Generation
 - Custom Model Training and Implementation
 - · Dataset quality control, quantification, management
 - Local LLM Deployment
- Past Performance Internal projects











Custom Application Design, Architecture, Development & Deployment:

Data Research, Insights, Visualization and Execution

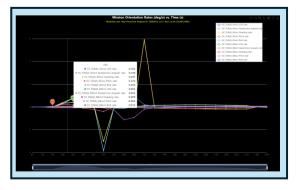


Dashboard Features Include:

- · Analysis Asset (Space and Ground) Management
- Analysis Job Scheduling and Management
- Analysis Completion Notifications
- Historical Analysis Artifact Repository
- Custom Trajectory and Orbital Ephemeris Data Support

3D Analysis Representations in Cesium:

- Time synched representations of scenarios
- · In browser 3D modeling and visualization
- Open source geospatial 3d modeling





Graphing Engine:

- Standardized analysis representations
- Open Source Apache Echarts
- Storage mechanism is future proofed. Easily support other charting libraries and data model won't need modification
- Consistency in analysis artifact generation