



Human-Valued Analytics • Sustainability • Resiliency

CORPORATE CAPABILITIES

Artificial Intelligence and Software Engineering

- Enterprise-wide Data Collection, Monitoring, and Analytics of IoT for Energy, Environmental and Housing
- Full Stack Software Engineering for Financial, Insurance and Healthcare
- Machine Learning models using Regression, Classification, Clustering, and Anomaly Detection
- Natural Language Processing (NLP), Text and Sentiment Analysis and Chatbot Apps
- Multi-platform Cloud-Computing and Application Migration (AWS and Azure)
- Digital Transformation, Business Intelligence, Advanced Visualization
- Continuous Integration, Testing, Deployment of Web, Mobile Applications and Systems Engineering
- Thought-Leadership in Ethics, Bias, Diversity, Privacy, Transparency, and Security, in Data Management and Artificial Intelligence (AI)

Sustainability and Resiliency Consulting

- Energy, Environmental and Water Engineering, and Sustainability Planning
- Energy Efficiency and Renewable Energy Feasibility Assessments and Management
- Project Management and Automated Program Monitoring, Evaluation and Learning Systems (Theory of Change)
- Curriculum Development and Training for Data-Driven, Analytical and Sustainable Workforce
- Proposal Support and Capture Management for Sole-Source and Limited Competition Responses
- Strategic Security Planning, COOP and Emergency Management
- NIST SP 800-171 Cybersecurity Compliance Support



CONTACT

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CERTIFICATIONS

SBA-Certified EDWOSB/SDB
 Certified State of Maryland W/MBE/SDB
 Graduate of SBA 8(a)/BD Program
 Capable of receiving WOSB/EDWOSB awards sole-sourced, or with limited competition, in accordance with Federal Code of Regulation Title 13 part 127.700

NAICS

541611, 541512, 541690, 541511, 541330, 611430, 541519, 561210, 238210, 541513, 541620, 541990, 611420, 541612, 541618, 611710,
 *541430, 561410, 561499, 519190, 561990, 518210, 611420, 611430, 561410
 * Under represented EDWOSB/WOSB NAICS

SAM REGISTERED
CAGE CODE 45YS8
DUNS # 179979732
EDWOSB/WOSB/SDB/SB



PARTIAL PAST PERFORMANCE

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US Department of Housing and Urban Development

\$4.0 million 8(a) sole source direct award, FFP + Cost Reimbursement | CPARS was "Very Good"

- Developed Ground-breaking, enterprise-wide, cloud-based system to collect, analyze and report real-time energy performance of affordable multi-use properties nationwide using machine learning models and advanced visualization tools
- Captured, Cleaned, Processed, Stored and Monitored massive interval data from utility and environmental IoT smart meters and sensors; Evaluated program performance and impact
- Developed algorithms to predict, classify and recognize energy consumption patterns and device failures, and identified anomalous patterns in energy usage from unstructured and structured data sources and "intelligent" devices

Technologies

Java, .NET, AWS, Azure, C, C++, C#, Python, R, Jupyter Notebooks, SQL, Linux, Windows 10/8/7, Unix, Oracle, SQL Server, Web Services, J2EE, JavaScript, SOAP, REST, XML, JIRA, HTML5, JSON, ASP.NET, VB.NET, My SQL, PostgreSQL, iOS, Windows, Android

Subcontractor projects in Financial, Healthcare, and Education Sectors

Supporting Tasks to Commercial and Federal Agency Primes, Receiving "Very Good" to "Outstanding" assessments from Customers

- Expertise in conversational Artificial Intelligence and Trained Services using Microsoft Azure platforms in Cognitive Services and Bot Framework for nationwide insurer
- Developing innovative, custom Chatbots using Natural Language Processing (NLP), Cognitive Search Tools, Intent and Articulation (Entries), Session Management, REST calls to IBM Watson in C#, Text and Sentiment Analyses
- Creating insightful business intelligence and improved customer experience in delivering healthcare using Cognos Business Intelligence and Tableau visualization
- Provider of synchronous/asynchronous Introductory-to-Advanced Data Science and Business Analytics Training
- Consulting support to small, federal contractors on Cybersecurity, Risk Mitigation and NIST SP 800-171 Compliance

US Department of Labor National Office of Job Corps

\$3.5 million 8(a) sole source IDIQ direct award, Received "Outstanding" assessment from CO

- Performed expert-level program/project management as Agency's Sustainability and IT SME in liaisons with OMB
- Analyzed and tracked budgeted needs for capital improvements, prioritized major and deferred maintenance construction projects, developed custom Asset Management Performance Measures
- Developed Sustainability Communications Stakeholder Web Portal and Document Management systems
- Delivered Sustainability and Green Jobs curriculum framework for career and apprenticeship training

US Department of Transportation

Multiple 8(a) sole source direct awards, FFP, Received all favorable CPARS

- Performed first-ever Carbon Footprint Reduction, MEP Equipment and Facility Condition Assessments
- Conducted Utility Rate Analysis, Measurement and Verification, Benchmarking, Water Re-use Study
- Analyzed and updated Fleet, Energy, Environmental and Sustainability Policies for regulatory compliance
- Delivered comprehensive Continuity of Operations Plan (COOP)

Government, Multi-family Residential and Mixed-Use Commercial, Educational and Leisure Facilities

Multiple energy efficiency, renewable energy, water resources and environmental engineering projects

- Conducted several successful Energy Efficiency, Renewable Energy Assessments, and Facility Condition Assessments
- Planned and managed Ecosystem Restoration, Water Resources and Floodplain Resiliency Project

Additional Technologies

Azure Cognitive Services, Azure Bot, Mendix Low-Code, H2O Sparkling Water, DevOps, Hadoop, Spark, SSIS, SAS, SSRS, PowerPoint for Excel, D3.js, CosmosDB, No SQL, Mongo DB, Apache Cassandra, Scikit-learn, MATLAB, Git, NUnit, MS Unit Test

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