# Dossier: EXERGI PREDICTIVE LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $174,115.97

**Award Date:** 2024-01-16

**Branch:** SOCOM

## AI-Generated Intelligence Summary

**Company Overview:**

Exergi Predictive LLC, operating as Exergi AI, focuses on providing advanced predictive analytics and artificial intelligence solutions specifically tailored for maintenance, reliability, and performance optimization within the defense, aerospace, and energy sectors. Their core mission is to reduce operational costs, minimize downtime, and enhance the lifecycle management of critical assets through proactive, data-driven insights. They aim to solve the problem of reactive maintenance practices that lead to unplanned outages and increased expenses by leveraging machine learning to predict equipment failures and optimize maintenance schedules. Their unique value proposition lies in their focus on incorporating physics-based models with machine learning algorithms, claiming to offer more accurate and reliable predictions than purely data-driven approaches, particularly in situations with limited historical data or rapidly changing operational conditions. This hybrid approach allows for better understanding of the underlying physical processes driving equipment degradation.

**Technology Focus:**

* Offers physics-informed machine learning models for predicting equipment failures. These models combine data analytics with fundamental engineering principles to enhance accuracy and robustness, even with sparse data.
* Provides predictive maintenance software-as-a-service (SaaS) platform that integrates sensor data, maintenance records, and operational parameters to deliver actionable insights and recommended maintenance schedules. Claims to reduce unplanned downtime by up to 30%.

**Recent Developments & Traction:**

* In June 2022, Exergi AI secured a Phase II Small Business Innovation Research (SBIR) award from the US Air Force to develop predictive maintenance capabilities for propulsion systems.
* Partnership announced in early 2023 with a major aerospace component manufacturer (specific name not publicly available) to implement Exergi AI's predictive maintenance solution for optimizing manufacturing processes and reducing defects.
* Launched an updated version of their SaaS platform in Q4 2023, featuring enhanced anomaly detection capabilities and improved integration with enterprise asset management systems.

**Leadership & Team:**

* Dr. Saman Ameri, CEO:\*\* Holds a PhD in Mechanical Engineering and has extensive experience in developing and deploying predictive maintenance solutions for various industries, including energy and aerospace.
* Information regarding the CTO or President is not readily available from public sources within the specified search parameters.

**Competitive Landscape:**

* Uptake:\*\* Uptake offers a broad industrial AI platform, including predictive maintenance solutions. Exergi AI differentiates itself by its specific focus on integrating physics-based models with machine learning, aiming for higher accuracy and reliability in complex, physics-driven systems.
* C3.ai:\*\* C3.ai provides enterprise AI solutions across various industries. While they offer predictive maintenance capabilities, Exergi AI's niche focus and expertise in the defense and aerospace sectors, coupled with their emphasis on physics-informed AI, provide a competitive edge in those specific markets.

**Sources:**

* [https://www.exergiai.com/](https://www.exergiai.com/)
* [https://www.sbir.gov/sbirsearch/detail/2182770](https://www.sbir.gov/sbirsearch/detail/2182770)
* [https://www.crunchbase.com/organization/exergi-predictive](https://www.crunchbase.com/organization/exergi-predictive)