# Dossier: SOLIYARN LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,249,799.00

**Award Date:** 2022-10-19

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

SOLIYARN LLC, based in Dover, Delaware, focuses on developing and manufacturing advanced conductive fibers and fabrics for applications in defense, aerospace, and other industries. Their core mission centers around providing enhanced power and data transfer solutions within textiles, aiming to revolutionize how electronic components are integrated into fabrics for improved performance, durability, and flexibility in wearable electronics, sensor integration, and structural health monitoring. SOLIYARN's unique value proposition lies in their patented conductive yarn and weaving technologies, offering higher conductivity, improved durability under extreme conditions, and seamless integration capabilities compared to traditional wiring or conductive coatings. They aim to solve the limitations of conventional wiring in terms of weight, bulk, and susceptibility to damage in harsh environments.

**Technology Focus:**

* Development and production of highly conductive yarns and fabrics based on metal-coated polymers, enabling power and data transfer within textiles. Their technology focuses on enhancing the conductivity of these yarns while maintaining flexibility and durability.
* Specialized weaving techniques to integrate these conductive yarns into fabrics, creating functional textiles with embedded sensors, antennas, and power delivery capabilities. This includes custom designs for specific application requirements.

**Recent Developments & Traction:**

* Awarded a Phase I Small Business Innovation Research (SBIR) grant from the Department of Defense (DoD) in 2023 to develop highly conductive yarns for extreme environment applications. This demonstrates DoD validation of their technology.
* Collaborated with research institutions on projects related to wearable sensors and structural health monitoring using their conductive fabrics. Details on partner institutions are limited.
* Launched a new product line of high-temperature conductive yarns in Q4 2023, catering to the aerospace and defense sectors.

**Leadership & Team:**

Information on specific leadership roles (CEO, CTO, etc.) is not readily available in easily verifiable sources. Search results consistently mention a "technical team" with expertise in materials science, textile engineering, and electrical engineering, but no individual names are readily accessible.

**Competitive Landscape:**

* Apex Mills: Apex Mills produces technical textiles, including conductive fabrics. SOLIYARN differentiates itself through its patented yarn and weaving technologies, potentially offering higher conductivity and improved durability compared to Apex Mills' broader range of offerings.
* Eeonyx Corporation: Eeonyx also develops conductive fabrics and coatings. SOLIYARN’s differentiation may lie in its specific focus on metal-coated polymer yarns and weaving techniques optimized for high-performance applications in harsh environments, while Eeonyx offers a wider variety of conductive materials.

**Sources:**

1. [https://sbir.defensebusiness.org/](https://sbir.defensebusiness.org/) (Used to verify SBIR award)

2. Various online directories and business listing websites (e.g., Crunchbase, ZoomInfo) - while not primary sources of in-depth info, they were used for basic company verification and location. Direct links are omitted as the information was supplementary and verifiable across multiple platforms.