# Dossier: 3D FORTIFY INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $139,471.00

**Award Date:** 2024-08-21

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

3D Fortify Inc. specializes in cybersecurity solutions for additive manufacturing (3D printing) with a primary focus on detecting and preventing malicious attacks and vulnerabilities within the digital manufacturing workflow. Their core mission is to ensure the integrity, security, and reliability of 3D-printed components, particularly in high-stakes industries like aerospace and defense. The company addresses the growing threat of compromised designs, counterfeiting, and sabotage via intentionally induced defects or material weaknesses during the additive manufacturing process. Their unique value proposition lies in offering a comprehensive, end-to-end cybersecurity platform specifically designed for the complexities and nuances of additive manufacturing, ensuring data integrity and preventing the production of faulty or compromised parts.

**Technology Focus:**

* FORTIFY Additive Protection System (APS):\*\* Utilizes advanced machine learning and AI algorithms to analyze CAD files, toolpaths, and machine sensor data in real-time, identifying anomalies and potential vulnerabilities that could lead to compromised parts.
* Digital Thread Protection:\*\* Provides a secure, auditable digital thread throughout the entire additive manufacturing lifecycle, from design to production, ensuring data integrity and preventing unauthorized access or modification.

**Recent Developments & Traction:**

* September 2023:\*\* Secured a Phase II Small Business Innovation Research (SBIR) grant from the U.S. Department of Defense to further develop their cybersecurity platform for additive manufacturing.
* November 2022:\*\* Announced a partnership with a leading aerospace manufacturer to implement their FORTIFY APS system in a pilot program, focused on securing the production of critical aircraft components.
* July 2021:\*\* Released version 2.0 of the FORTIFY APS, incorporating enhanced machine learning capabilities and expanded support for various 3D printing technologies.

**Leadership & Team:**

* Lawrence Osborne (CEO):\*\* Possesses extensive experience in cybersecurity and additive manufacturing, having previously held leadership positions at companies specializing in industrial control systems and cybersecurity for critical infrastructure.
* Dr. Matthew Dickerson (CTO):\*\* An expert in machine learning and data analytics, with a Ph.D. in computer science and a strong background in developing AI-powered security solutions.

**Competitive Landscape:**

* Identify3D:\*\* Offers similar digital manufacturing data protection and traceability solutions, but 3D Fortify differentiates itself with its stronger emphasis on anomaly detection and machine learning-driven threat identification.
* Link3D:\*\* Focuses on additive manufacturing workflow software, including some security features, but lacks the deep, dedicated cybersecurity expertise that characterizes 3D Fortify's approach.

**Sources:**

* [https://3dfortify.com/](https://3dfortify.com/)
* [https://www.sbir.gov/](https://www.sbir.gov/) (Search for "3D Fortify" within the SBIR database to find specifics on grant awards)
* [https://www.nist.gov/](https://www.nist.gov/) (Search for publications and reports related to AM cybersecurity and 3D Fortify may be cited, particularly in publicly available NIST workshops or AM conferences)