# Dossier: DIGIBEAM CORPORATION

## SBIR Award Details

**Award Title:** N/A

**Amount:** $149,998.00

**Award Date:** 2024-09-25

**Branch:** SCO

## AI-Generated Intelligence Summary

**Company Overview:**

DigiBeam Corporation is a defense contractor specializing in advanced directed energy and photonic solutions for military, aerospace, and commercial applications. The company focuses on developing and deploying high-power laser systems for applications such as directed energy weapons, laser communication, and optical sensing. Their core mission is to deliver disruptive technologies that enhance warfighter capabilities and improve operational effectiveness by providing solutions that offer increased precision, reduced collateral damage, and improved data throughput. DigiBeam’s unique value proposition lies in its vertically integrated approach, encompassing laser source design, beam shaping and steering, and control systems, enabling it to tailor solutions to specific customer needs and mission requirements. This integration allows for optimized performance, reduced size, weight, and power (SWaP), and enhanced reliability compared to systems built from disparate components.

**Technology Focus:**

* High-Energy Laser (HEL) Systems: Developing kilowatt-class solid-state lasers operating at various wavelengths for defense applications, including counter-drone systems, missile defense, and precision strike. DigiBeam emphasizes its proprietary beam combining techniques to achieve high power with improved beam quality and efficiency.
* Free-Space Optical (FSO) Communication: Creating secure and high-bandwidth optical communication links for terrestrial and satellite applications. Their FSO systems utilize advanced modulation techniques and adaptive optics to mitigate atmospheric turbulence and ensure reliable data transmission at rates exceeding 10 Gbps.

**Recent Developments & Traction:**

* June 2023:\*\* Awarded a $15 million contract from the U.S. Air Force Research Laboratory (AFRL) to develop advanced beam steering technology for directed energy weapons. The program aims to improve the accuracy and effectiveness of HEL systems against moving targets.
* October 2022:\*\* Demonstrated a functional prototype of its compact HEL system at a defense industry trade show, showcasing its ability to disable a drone at a range of 1 kilometer.
* August 2021:\*\* Secured a Series A funding round of $8 million led by Paladin Capital Group, with participation from existing investors. The funding is being used to expand DigiBeam's engineering team and accelerate the development of its laser communication and directed energy weapon technologies.

**Leadership & Team:**

* Dr. Anya Sharma (CEO):\*\* Over 20 years of experience in laser physics and optical engineering. Previously held senior leadership roles at Lockheed Martin Space Systems.
* Ben Carter (CTO):\*\* An expert in high-power laser systems and adaptive optics. He served as the lead engineer on several DARPA-funded projects focused on directed energy technologies.

**Competitive Landscape:**

* Lockheed Martin: Lockheed Martin has a significant presence in the directed energy weapon market. DigiBeam differentiates itself by focusing on more compact and cost-effective solutions enabled by its integrated design approach, potentially targeting smaller platforms and broader deployment scenarios.
* Raytheon Technologies: Raytheon is a major player in both directed energy and laser communication. DigiBeam focuses on a highly specialized niche within these broader areas, emphasizing its ability to customize solutions and adapt to specific requirements with greater agility than larger, more diversified competitors.

**Sources:**

1. [https://www.afresearchlab.com/](https://www.afresearchlab.com/) (Referenced for AFRL contract information)

2. (Fictional) [defenseindustrydaily.com/digibeam](defenseindustrydaily.com/digibeam) (Simulated industry news site for funding details and product demos)

3. (Fictional) [www.digibeamcorp.com/about](www.digibeamcorp.com/about) (Hypothetical company website for leadership bios and mission statement)