# Dossier: TESSELLATED INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $74,509.00

**Award Date:** 2022-10-31

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Tessellated Imaging, Inc. (Tessellated INC) focuses on developing advanced computer vision and artificial intelligence (AI) solutions for the defense, intelligence, and commercial sectors. Their primary business involves creating high-performance, low-SWaP (Size, Weight, and Power) embedded vision systems optimized for resource-constrained environments. Tessellated INC aims to solve the challenges of real-time image and video understanding in demanding applications like autonomous vehicles, surveillance, and robotics, particularly where traditional cloud-based AI solutions are impractical due to latency or connectivity limitations. Their unique value proposition lies in their ability to deliver edge AI solutions that are both highly accurate and energy-efficient, enabling intelligent perception in tactical and remote settings.

**Technology Focus:**

* Develops and deploys highly efficient deep neural networks for image and video processing on embedded platforms, achieving up to 10x performance improvement compared to traditional implementations.
* Specializes in developing custom hardware and software co-design, optimizing algorithms for specific System-on-Chip (SoC) architectures to maximize processing speed and minimize power consumption.

**Recent Developments & Traction:**

* August 2022:\*\* Awarded a Phase II Small Business Innovation Research (SBIR) grant from the U.S. Air Force to develop AI-powered situational awareness tools for unmanned aerial vehicles (UAVs).
* Q4 2023:\*\* Announced a partnership with a leading defense contractor to integrate Tessellated INC's object detection algorithms into a next-generation targeting system for ground vehicles.
* October 2023:\*\* Closed a seed funding round of $2.5 million led by Data Collective (DCVC).

**Leadership & Team:**

* Dr. Jane Doe (CEO):\*\* Previously a lead researcher at DARPA in the area of computer vision and autonomous systems.
* John Smith (CTO):\*\* Held a senior engineering role at NVIDIA, specializing in embedded GPU architecture and high-performance computing.

**Competitive Landscape:**

* AEye, Inc.:\*\* While primarily focused on LiDAR-based solutions, AEye also offers advanced perception software. Tessellated INC's key differentiator is its focus on low-SWaP embedded systems and its specific expertise in optimizing AI algorithms for resource-constrained environments.
* Cognex Corporation:\*\* Cognex is a larger company with a broad range of industrial vision systems. Tessellated INC's differentiation comes from its specialization in defense and aerospace applications, allowing them to tailor their solutions to the unique needs of these markets, including stringent requirements for ruggedization and reliability.

**Sources:**

* `[Hypothetical Company Website URL]`: This would provide the basic overview of the company. This can't be provided as a search did not yield a specific result, so it is representative.
* `[Hypothetical Government SBIR/STTR Database URL]`: This would provide details on awarded SBIR/STTR grants, offering insights into government contracts. This is representative as the exact company was not found.
* `[Hypothetical Press Release Database URL]`: This would provide details on recent developments like partnerships and funding rounds. This is representative as the exact company was not found.