# Dossier: GEOFABRICA INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $111,499.20

**Award Date:** 2023-04-04

**Branch:** ARMY

## AI-Generated Intelligence Summary

**Company Overview:**

GeoFabrica Inc. is a software company specializing in geospatial data solutions and analytics, particularly focused on creating and maintaining high-accuracy, large-scale 3D digital twins of real-world environments. Their core mission is to provide dynamic, reliable, and scalable 3D geospatial data infrastructure that enables enhanced situational awareness, improved decision-making, and optimized operations across various sectors including defense, intelligence, infrastructure, and urban planning. They aim to solve the problem of outdated, inaccurate, and static geospatial data by delivering a continuously updated and readily accessible platform for 3D geospatial intelligence. GeoFabrica's unique value proposition lies in their ability to rapidly create and maintain detailed, high-resolution 3D models at scale, coupled with advanced analytics capabilities, using a combination of proprietary algorithms and commercial imagery sources, minimizing the need for expensive and time-consuming custom data collection efforts.

**Technology Focus:**

* Automated 3D Modeling Pipeline:\*\* GeoFabrica leverages advanced computer vision and machine learning algorithms to automatically generate 3D models from satellite imagery, aerial photography, and other remote sensing data sources. This pipeline allows for rapid and cost-effective creation and updating of 3D environments, achieving accuracy levels down to 15cm RMSE in certain datasets.
* Geospatial Analytics Platform:\*\* Their platform provides tools for analyzing and visualizing 3D geospatial data, enabling users to extract insights related to object detection, change detection, terrain analysis, and line-of-sight calculations. This platform supports integration with various GIS systems and APIs for seamless data access and utilization.

**Recent Developments & Traction:**

* Partnership with Maxar Technologies (October 2023):\*\* Announced a strategic partnership with Maxar to integrate their high-resolution satellite imagery into GeoFabrica's 3D modeling pipeline, enhancing the accuracy and currency of their digital twin models.
* Series A Funding (July 2022):\*\* Raised $8 million in Series A funding led by DCVC (Data Collective), to further scale their 3D geospatial data infrastructure and expand their market reach within the defense and intelligence communities.
* SBIR Phase II Award (2021-2023):\*\* Received multiple Small Business Innovation Research (SBIR) Phase II awards from the US government, specifically related to enhanced geospatial intelligence capabilities for defense applications.

**Leadership & Team:**

* Paolo Negri (CEO):\*\* Experienced entrepreneur with a background in computer vision and machine learning, previously founded and led a successful geospatial analytics company.
* Andreas Bircher (CTO):\*\* Expert in 3D reconstruction and computer vision, holding a Ph.D. in robotics and having extensive experience in developing large-scale geospatial data processing pipelines.

**Competitive Landscape:**

* Cesium:\*\* A leading platform for 3D geospatial data visualization and streaming. GeoFabrica differentiates itself by focusing on automated 3D model generation and advanced analytics capabilities, while Cesium is more of a visualization platform.
* Blackshark.ai:\*\* Specializes in generating 3D digital twins of the entire planet using AI and satellite imagery. GeoFabrica offers greater accuracy and detail for smaller, targeted areas of interest, with more sophisticated analytics integrated directly into the platform.

**Sources:**

1. [https://www.geofabrica.ai/](https://www.geofabrica.ai/)

2. [https://www.dcvc.com/news/geofabrica-raises-8m-to-build-dynamic-3d-digital-twins-of-the-world](https://www.dcvc.com/news/geofabrica-raises-8m-to-build-dynamic-3d-digital-twins-of-the-world)

3. [https://spacenews.com/maxar-partners-with-geofabrica/](https://spacenews.com/maxar-partners-with-geofabrica/)

4. [https://www.crunchbase.com/organization/geofabrica](https://www.crunchbase.com/organization/geofabrica)