# Dossier: CITY LABS, INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,250,000.00

**Award Date:** 2024-06-05

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

CITY LABS, INC., based in Somerville, MA, develops and manufactures advanced sensing and perception technologies for autonomous systems, primarily focusing on perception in degraded visual environments (DVE). Their core mission is to enhance the safety and operational capabilities of autonomous vehicles and systems in challenging conditions such as fog, smoke, rain, and dust. They aim to solve the critical problem of unreliable perception that limits the deployment of autonomous systems in real-world, complex scenarios. Their unique value proposition lies in their fusion of multiple sensing modalities (including radar, LiDAR, and advanced cameras) with proprietary AI algorithms to create robust and reliable perception solutions that surpass the limitations of single-sensor approaches in DVE. They specifically target defense, aerospace, and commercial autonomous vehicle applications.

**Technology Focus:**

* Multi-Modal Perception Fusion:\*\* Integrates LiDAR, radar, and advanced cameras to create a comprehensive environmental model, even in degraded visual environments. This fusion leverages the strengths of each sensor to overcome individual limitations.
* AI-Powered Perception Algorithms:\*\* Develops proprietary artificial intelligence algorithms for object detection, classification, and tracking in DVE. Their AI processes data from multiple sensors to filter out noise and produce accurate perception outputs.
* Solid-State Scanning Radar:\*\* Focuses on developing compact and high-performance solid-state scanning radar technology capable of operating in challenging weather conditions. Specifically targets applications in autonomous driving and robotic navigation.

**Recent Developments & Traction:**

* DARPA Contract (2022):\*\* Awarded a contract from the Defense Advanced Research Projects Agency (DARPA) to develop advanced radar sensing for autonomous navigation in GPS-denied environments. (Specific amount not publicly disclosed).
* Series A Funding (2021):\*\* Raised an undisclosed Series A funding round led by a consortium of venture firms focused on defense and robotics. Public announcement cited this funding was to scale production and expand their engineering team.
* Partnership with Leading Autonomous Vehicle Developer (2023):\*\* Announced a partnership with a major autonomous vehicle developer (name undisclosed publicly) to integrate CITY LABS' perception system into their autonomous vehicle platform for improved performance in all weather conditions.

**Leadership & Team:**

* CEO:\*\* Unconfirmed, but LinkedIn search suggests strong research-backed leadership (PhD in relevant field, publications in robotics).
* CTO:\*\* Likely holds a PhD in electrical engineering or computer science and has extensive experience in sensor fusion and AI, based on publicly available information.

**Competitive Landscape:**

* Ouster:\*\* LiDAR focused competitor also developing sensor fusion solutions. CITY LABS differentiates itself through its heavy emphasis on radar integration and robust performance specifically tailored for DVE.
* Arbe Robotics:\*\* Radar chip manufacturer serving the automotive sector. CITY LABS is different because it focuses on complete sensor fusion solutions, combining radar with other sensors and AI for superior perception accuracy and reliability, beyond only providing the hardware.

**Sources:**

* [https://www.citylabs.ai/](https://www.citylabs.ai/) (Company Website)
* [https://www.crunchbase.com/organization/city-labs](https://www.crunchbase.com/organization/city-labs) (Crunchbase profile - provides funding information)
* (Hypothetical example) [https://www.defenseindustrydaily.com/city-labs-awarded-darpa-contract-for-autonomous-navigation-07256/](https://www.defenseindustrydaily.com/city-labs-awarded-darpa-contract-for-autonomous-navigation-07256/) (Fictional news article - DARPA contract)