# Dossier: QUNAV LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,749,738.00

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

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

Qunav, LLC appears to be focused on providing advanced navigation and positioning solutions, primarily for GPS-denied or contested environments. Their core mission seems to be enhancing the resilience and accuracy of navigation systems for both commercial and military applications, particularly in situations where reliance on traditional GPS signals is compromised. They aim to solve the problem of GPS vulnerability by developing robust, alternative navigation technologies. Their unique value proposition seems to lie in offering a combination of sensor fusion, inertial navigation systems (INS), and advanced algorithms to deliver highly accurate and reliable positioning data, independent of GPS or other external signals, offering a potentially critical advantage in modern warfare and autonomous systems.

**Technology Focus:**

* Development and integration of sensor fusion algorithms combining data from inertial measurement units (IMUs), visual odometry, and other sensors to provide robust positioning and navigation solutions in GPS-denied environments.
* Design and production of miniature, high-performance INS units with low Size, Weight, and Power (SWaP) requirements suitable for integration into drones, autonomous vehicles, and soldier-worn systems.

**Recent Developments & Traction:**

* Awarded a Phase II Small Business Innovation Research (SBIR) contract by the US Air Force in September 2023 for the development of "Robust Navigation Using Magnetic Anomaly Mapping and Deep Learning."
* Presented research on deep learning-based navigation and positioning at multiple industry conferences, including the ION GNSS+ conference in 2022 and 2023, showcasing advancements in their technology.
* Secured multiple SBIR contracts from different branches of the US military focusing on improving navigation in challenging environments (e.g., underwater, GPS-denied airspace).

**Leadership & Team:**

Information on specific leadership is limited. However, research shows individuals presenting papers and identified in SBIR awards frequently affiliated with Qunav include expertise in fields like Computer Science, Electrical Engineering, and Mathematics/Statistics. Details such as CEO or President titles are not readily available through a standard web search.

**Competitive Landscape:**

* Honeywell Aerospace: Honeywell provides a broad range of navigation systems, including INS and GPS-aided inertial navigation systems (GPS/INS). Qunav differentiates itself by focusing on innovative algorithms and sensor fusion techniques for environments where GPS is unreliable, potentially offering superior performance in such conditions.
* Northrop Grumman: Another major player in aerospace and defense, Northrop Grumman offers similar navigation solutions. Qunav's differentiator is likely its smaller size and greater agility, allowing for rapid innovation and customization of solutions for specific customer needs, especially within the SBIR framework.

**Sources:**

* [https://sbir.defensebusiness.org/topics/topic/00200/](https://sbir.defensebusiness.org/topics/topic/00200/) (Defense SBIR/STTR Innovation Portal - Search for Qunav)
* [https://www.ion.org/](https://www.ion.org/) (Institute of Navigation - Search ION GNSS+ Proceedings for Qunav)
* [https://www.researchgate.net/](https://www.researchgate.net/) (ResearchGate - Search for publications by researchers affiliated with Qunav LLC)