# Dossier: QUANTUM INTERFACE, LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,150,000.00

**Award Date:** 2023-02-09

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Quantum Interface, LLC (QI) develops advanced human-machine interface (HMI) solutions, focusing on enabling intuitive and efficient interaction with complex systems, particularly within the defense and aerospace sectors. Their primary business revolves around creating software and hardware solutions that dramatically reduce cognitive load for operators, improve decision-making speed and accuracy, and enhance situational awareness in demanding environments. QI's core mission is to revolutionize how humans interact with technology by leveraging innovative techniques in visual processing, data visualization, and user-centered design. Their unique value proposition lies in their ability to seamlessly integrate complex data streams into a cohesive and easily interpretable format, allowing operators to focus on critical tasks rather than struggling with interface complexities. This is achieved through a combination of their patented interaction engine and application-specific customization.

**Technology Focus:**

* QI's core technology is their patented interaction engine, which provides a foundation for creating intuitive and efficient HMIs. This engine allows for the creation of "zero-touch" or "touch-free" interfaces, utilizing eye-tracking, gesture recognition, and voice control to interact with data.
* Their products include software development kits (SDKs) and customized application solutions tailored to specific use cases, such as unmanned aerial vehicle (UAV) control, command and control (C2) systems, and air traffic management. These applications often involve real-time data visualization and complex decision-making scenarios.

**Recent Developments & Traction:**

* In July 2021, Quantum Interface announced a Small Business Innovation Research (SBIR) Phase II award from the United States Air Force (USAF) for development of their HMI technology for air mobility command and control.
* In November 2021, Quantum Interface partnered with SimVentions, Inc. to explore further development and application of their QISight HMI platform in the defense sector.
* Quantum Interface showcased their advancements in HMI technology at the Air Force Association's Air, Space & Cyber Conference in 2022, demonstrating its capabilities for reducing operator workload and enhancing situational awareness.

**Leadership & Team:**

* Ryan Witte, CEO and Co-founder: Extensive experience in software engineering and HMI design.
* Greg Dailey, Co-founder: Background not readily available online.

While specific information on all team members is limited, online resources indicate a team composed of engineers and designers with experience in HMI, software development, and defense applications.

**Competitive Landscape:**

* Varjo: Develops high-end virtual and mixed reality headsets and software. QI differentiates itself through its focus on non-VR/AR touchless interfaces and specific application in demanding operational environments where bulky headsets are not practical.
* Tobii: Primarily known for eye-tracking technology, including applications in gaming and accessibility. QI distinguishes itself by focusing on the integration of eye-tracking (and other modalities) into complete HMI solutions specifically tailored for critical, real-time decision making in defense and aerospace.

**Sources:**

* [https://www.quantuminterface.com/](https://www.quantuminterface.com/)
* [https://www.prnewswire.com/news-releases/quantum-interface-llc-awarded-small-business-innovation-research-sbir-phase-ii-award-from-the-united-states-air-force-usaf-301333317.html](https://www.prnewswire.com/news-releases/quantum-interface-llc-awarded-small-business-innovation-research-sbir-phase-ii-award-from-the-united-states-air-force-usaf-301333317.html)
* [https://simventions.com/simventions-and-quantum-interface-announce-partnership/](https://simventions.com/simventions-and-quantum-interface-announce-partnership/)