# Dossier: CYBERNET SYSTEMS CORPORATION

## SBIR Award Details

**Award Title:** N/A

**Amount:** $99,889.00

**Award Date:** 2024-09-10

**Branch:** DLA

## AI-Generated Intelligence Summary

**Company Overview:**

Cybernet Systems Corporation is a privately held research and development company specializing in advanced simulation, training, and engineering solutions for the defense, aerospace, and homeland security sectors. Their core mission is to deliver cutting-edge technology and expertise that enhances operational effectiveness, improves decision-making, and protects critical assets. Cybernet aims to solve complex problems related to human-machine teaming, virtual reality training, autonomous systems, and data analytics, leveraging artificial intelligence, machine learning, and sensor fusion technologies. Their unique value proposition lies in their ability to rapidly prototype, develop, and deploy customized solutions tailored to the specific needs of their government and commercial clients, coupled with a strong commitment to innovation and a deep understanding of the challenges faced by their target markets.

**Technology Focus:**

* VR-Vantage:\*\* A commercial-off-the-shelf (COTS) software platform for 3D visualization, simulation, and training, used to create immersive virtual environments for training and mission rehearsal. It integrates with various simulation systems and hardware, including VR headsets and motion tracking devices. VR-Vantage has been utilized in a variety of applications, including flight simulation, battlefield training, and urban operations.
* AI-Enabled Autonomous Systems:\*\* Development and deployment of artificial intelligence and machine learning algorithms for autonomous navigation, object recognition, and decision support in unmanned aerial vehicles (UAVs) and ground vehicles (UGVs). This includes sensor fusion techniques that integrate data from multiple sensors (e.g., lidar, cameras, radar) to improve situational awareness and operational capabilities.

**Recent Developments & Traction:**

* Partnership with the U.S. Army:\*\* Cybernet has several active Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) contracts with the U.S. Army, focusing on AI-enabled autonomy for unmanned ground vehicles. A recent emphasis has been on developing robust perception algorithms capable of operating in degraded visual environments.
* VR-Vantage Enhancements:\*\* Continued updates to the VR-Vantage platform with improved rendering capabilities, support for new VR hardware, and integration with advanced simulation models. Release of new tools for scenario generation and mission planning within VR-Vantage.
* AI-Powered Cyber Security Research:\*\* Cybernet Systems has been actively researching and developing AI algorithms to aid in cyber security, threat detection and response systems.

**Leadership & Team:**

* The company's website lists numerous senior personnel with specialized expertise in relevant areas such as AI, Simulation, and Government contracting. Further details on their leadership team is less readily available in the public domain.

**Competitive Landscape:**

* VT MAK (A subsidiary of ST Engineering):\*\* VR MAK is a major competitor in the simulation and training market, offering a comprehensive suite of products and services for military and defense applications. Cybernet differentiates itself through its specialization in AI-enabled autonomy and its focus on rapidly prototyping custom solutions.
* Collins Aerospace:\*\* Collins Aerospace is a large conglomerate offering a broad portfolio of products. Cybernet differs in its ability to focus on specific niche markets.

**Sources:**

* [https://www.cybernet.com/](https://www.cybernet.com/)
* [https://www.sbir.gov/](https://www.sbir.gov/) (Search for Cybernet Systems Corporation)