



Cognitive Object Reasoning Engine (CORE)

Phase III IMPACTS

- Over \$3M in sales revenue to date.
- Nine separate contracts with the Army, Navy, and Air Force to implement CORE technology throughout Department of Defense (DoD). Customers include: U.S. Army Research Institute; U.S. Air Force Research Laboratory; U.S. Navy Space and Naval Warfare Systems Command; and DoD Modeling and Simulation Office.
- CORE is trademarked and has 1 patent pending.
- Contract signed to implement CORE in a commercial network security system.
- Recipient of 1998 U.S. SBA Tibbetts award for R&D excellence.



The Army is looking more and more to automation and knowledge management to solve information technology problems, especially in testing equipment and soldier training. There is a pressing need for software tools that can quickly and efficiently add complex logic to computer software to represent realistic human behaviors, to produce decision aids, to automate command and control functions, and for network security. To address this pressing requirement, Bevilacqua Research Corporation developed a set of software development tools that, through the use of new methods in hybrid artificial intelligence (AI), allow advanced computer logic to be quickly and easily created. The Cognitive Object Reasoning Engine (CORE) toolkit allows users to implement deep human cognitive reasoning in computer software much more easily than with current methods. The CORE approach solves many of the common problems associated

with current complex AI systems, making the implementation of large amounts of human cognitive intelligence easier and more maintainable.

CORE is used throughout the Department of Defense in Command, Control, Communications, Computers, and Intelligence (C4I) systems, decision aids, modeling and simulation, and Course of Action Analysis (COAA). Its utility to the DoD continues to grow each year with its recent implementation in a virtual threat simulator and as a method to automate the battle damage assessment process. It is also being incorporated in the commercial sector through an agreement with a network security software company and negotiations are in progress for potential international sales to a Korean video game manufacturer.