

Project Title: Mapping the Ecosystem for Critical and Emerging Technologies

Awardee: Institute for Defense Analysis

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Abstract:

The purpose of this task order is to provide support for NSF staff engaged with The White House Office of Science and Technology Policy (OSTP) in analyzing and providing input into the development of policies related to high priority technologies. Specifically, NSF seeks to conduct a rigorous ecosystem analysis on critical and emerging technologies (CET), including, but not limited to artificial intelligence (AI), biotechnology, and microelectronics to inform the policy process within the U.S. Government. The goals of this effort are to: (1) develop a technology ecosystem framework to inform development and implementation of effective strategies for U.S. leadership in priority CET areas, using AI as a proof-of-concept test case; and (2) analyze the ecosystem for other CETs, apply the framework to assess challenges, opportunities, risks, etc., with an emphasis on identifying and examining high-priority components/nodes of the ecosystem.