



2021 Global Maritime Forum



Dr. Ayodeji Coker

Dr. Ayodeji Coker serves as the Office of Naval Research (ONR) Portfolio Manager for Autonomy. In this role, he leads ONR's corporate strategy in Autonomy; manages the corresponding investment portfolio; and provides focus on transition, operationalization, and fielding for autonomy and autonomous unmanned systems.

Dr. Coker also serves as a Science Director for Artificial Intelligence, Autonomy, and Unmanned Systems at the Office of Naval Research Global (ONRG) London office. He brings domain expertise in Complex Adaptive Systems, Distributed and Collaborative Autonomy, and Command and Control (C2) Battlespace Awareness. His key technical areas of interest are in Swarm Intelligence and Artificial Intelligence. In particular, Swarm intelligence as it relates to how swarm collectives make decisions in complex dynamic environments, and how humans interact effectively with Swarms. Dr. Coker is also currently leading a grand challenge effort in partnership with the Alan Turing Institute (United Kingdom) to develop 'AI Scientists': AI systems capable of making Nobel quality scientific discoveries highly autonomously at a level comparable, and possibly superior, to the best human scientists by 2050. His primary responsibilities are to identify cutting-edge research, and to facilitate opportunities for international collaboration and partnerships with the Naval Science & Technology Research Enterprise, and with U.S. academic institutions. He is also responsible for coordinating ONRG S&T activities in Sweden, Italy and Sub-Saharan Africa. Prior to joining ONR and ONRG, Dr. Coker was the Naval Information Warfare Center Pacific (NIWC) (formerly Space and Naval Warfare Systems Center Pacific (SPAWAR)) Project Manager and DARPA Contract Officer Technical Representative (COTR) for the Defense Sciences Office (DSO) Simplifying Complexity in Scientific Discovery (SIMPLEX) program. During his time at NIWC, Dr. Coker worked on various projects in distributed and collaborative autonomy, and C2 data synchronization in environments characterized by Disconnected, Intermittent, and Low-Bandwidth (DIL) conditions.

Dr. Coker received his Bachelor of Science degree in Physics from the University at Albany, New York, his Masters of Science degree in Electrical Engineering (optical communications) from Northwestern University, and his doctorate in Computer Engineering from Texas A&M University. His Doctoral work focused on the performance and reliability of Nano-electronic Memories.