

Dr. J. Clayton Kerce is a Principal Research Scientist and the Division Head of Advanced Research in Computing and Artificial Intelligence Division (ARCAID) at the Georgia Tech Research Institute's Information and Communications Laboratory. He holds a Ph.D. in Mathematics from Georgia Institute of Technology, complementing his B.S. in Applied Mathematics from the same institution.

With over two decades of experience, Dr. Kerce has established himself as a leader in advanced computing, artificial intelligence, and cybersecurity research. His work focuses on developing innovative solutions for complex national security challenges, particularly in the realms of AI/ML applications for defense and intelligence.

Dr. Kerce currently leads research initiatives across Artificial Intelligence, Machine Learning, and Data Science. His projects include the development of graph neural networks and neuro-symbolic reasoning for software, hardware, OSINT, and ML security applications. Notably, he has pioneered inductive reasoning-based systems for countering physical domain adversarial attacks in image systems.

In his current role supporting organizations like the DoD Generative AI Task Force Lima, Dr. Kerce contributes to shaping the future of Generative AI in defense applications. He has also been instrumental in developing GTRI's capabilities in hosting and customizing large language models for specialized use cases.

His contributions to national security include developing new concepts in sensing, cybersecurity, and electronic warfare for organizations such as the Missile Defense Agency, US Army, DARPA, Department of Energy, and various Intelligence Community entities. Dr. Kerce served on the Missile Defense Advisory Committee, appointed by the Secretary of Defense to develop a 10-year technology roadmap for the Missile Defense Agency.

In addition to his research and leadership roles, Dr. Kerce is actively involved in professional societies. He is a member of the Association for the Advancement of Artificial Intelligence (AAAI) and the Institute of Electrical and Electronics Engineers (IEEE), including its Computational Intelligence Society.