Victoria Coleman, PhD

USAF Chief Scientist
Senior Advisor to the Director at CITRIS & the Banatao Institute,
  University of California
Former Director of DARPA

Speaking Topic: **Countering Digital Authoritarianism**

Biography. Dr. Victoria Coleman is USAF Chief Scientist and former Director of DARPA. She serves as Senior Advisor to the Director of the Center for Information Technology Research in the Interest of Society (CITRIS) at UC Berkeley where she is leading microelectronics technology policy.

Prior to DARPA she served as the Chief Executive Officer of Atlas AI P.B.C, a Silicon Valley startup that brings world class AI solutions to sustainable development. By combining satellite data with other data sets, Atlas AI's proprietary deep learning models create actionable insights for governments, NGOs, and commercial companies. Prior to joining Atlas AI, Coleman was the Chief Technology Officer at the Wikimedia Foundation, the nonprofit that supports Wikipedia, where she oversaw the organization's Technology department and technical roadmap, and was responsible for the evolution, development, and delivery of core platforms and architecture. In this role, Dr. Coleman worked to ensure an accessible and performant technology infrastructure and anticipate scale and capability challenges for the Wikimedia projects.

She was previously a Senior Vice President at Technicolor where she served as the CTO of the Connected Home Business. Prior to Technicolor she was Senior Vice President R&D for Harman's Infotainment Division. As Vice President Engineering at Yahoo! she was responsible for membership services, presentation layer technologies and developer relations. At Nokia as Vice President, Emerging Platforms she led a multi-disciplinary team creating strategic products including the Nokia Z Launcher and the Nokia X line of smartphones. As Vice President, Software Engineering at HP Palm GBU leading the webOS Platform team she built the HP Touchpad. As Vice President with Samsung'sAdvanced Institute of Technology in charge of the Computer Science Laboratory in San Jose, CA she initiated the development of Tizen and the Samsung Knox line of smartphones. She was previously Intel's Director for Security Initiatives and the Director of the Trust and Manageability Laboratory in Intel's Corporate Technology Group. She joined SRI International in 1998 after 10 years as a tenured professor in the University of London. She became the founding Director of SRI's System Design Laboratory in 1999. She was a member of the Defense Science Board, a member (and founding Chair) of DARPA's Microsystems Exploratory Council, a member of Lockheed Martin's Technology Advisory Group, a member of Airbus Industries Starboard and a member of Santa Clara University's Advisory Board for the Department of Computer Engineering. She also served on the Board of Directors of the Public Library of Science.

Abstract. Digital authoritarianism—the use of information technology by authoritarian regimes to surveil, repress, and manipulate domestic and foreign populations—is on the rise globally. In Myanmar, a military coup has instituted a nightly internet shutdown and hasblocked Facebook and Twitter since early February 2021. In China, facial recognition technology and a widespread mobile hacking campaign have been deployed to target and oppress ethnic minorities. Aiming to gain call logs, precise locations, contacts, photos, and other information, similar surveillance of mobile phone apps has emerged in Iran, North Korea, and Syria. In Mexico, spyware procured by the government to fight terrorism is being turned on its citizens to silence dissidents.

Countering digital authoritarianism requires not only technical ivnnovation, but also new policy and governance strategies within the public and private sectors. To start, the US must develop a new strategic framework to combat the rise of high tech illiberalism. This political and legal framework cannot be enacted without coordinated federal action. This much is clear. What remains unclear is the appropriate strategy to do so.This talk will explore the creation of such a strategic R&D agenda and policy framework.