A New Approach to Microelectronics Workforce Development for Government

2023 ERI SUMMIT



PROGRAM MANAGER: Dr. James Wilson Ph.D., Microsystems Technology Office

DATE: Thursday, August 24, 2023	TIME: 8:30am-3:30pm
ROOM NAME: 501 Chiwawa – 5 th Floor	

DESCRIPTION

This workshop will present new approaches to address technology challenges and workforce development efforts in government-focused microelectronics development and hardware security, fields where qualified graduates are notably hard to find. Government, industry, and academic panelists will prepare and present potential technically-focused solutions for enhancing the domestic hardware security workforce using the Heilmeier questions to guide their thinking. A panel discussion will follow the presentations and focus on how to get more students involved in hardware for government needs, especially from historically black colleges and universities (HBCUs), while simultaneously addressing the biggest technical challenges in the space.

AGENDA

08:30am-08:35am	Introduction
	Dr. James Wilson, DARPA MTO
08:35am-09:00am	H2: How is workforce development done today, and what are the limits of current practice?
	Bryan Casper, Intel Labs
09:00am-09:25am	H2: How is workforce development done today, and what are the limits of current practice?
	Dr. Kanton Reynolds, Director of Undergraduate Programs at NC State
09:25am-09:45am	H3: What is a new approach to workforce development and why will it be successful?
	Prof. Kevin Kornegay, Morgan State University
	Morning Break: 9:45am-10:15am
10:15am-10:40am	H3: What is a new approach to workforce development and why will it be successful?
	Dr. Kara Perry, USN
10:40am-11:05am	H3: What is a new approach to workforce development and why will it be successful?
	Dr. Ken Mai, Carnegie Mellon University
11:05am-11:30am	H3: What is a new approach to workforce development and why will it be successful?
	Dr. Oluseyi Ayorinde, DEVCOM Army Research Laboratory
	Lunch Break: 11:30am-12:30pm
12:30pm-12:55pm	H3: What is a new approach to workforce development and why will it be successful?
	Prof. Andrew Kahng, University of California San Diego
12:55pm-01:20pm	H4: If workforce development efforts are successful, what difference will it make?
	Rev. Canon Hugh R. Page Jr., Notre Dame
01:20pm-01:45pm	H5: How do we measure success in workforce development?
	Dr. Eric W. Breckenfeld, Nvidia
	Afternoon Break: 1:45pm-2:15pm
02:15pm-03:25pm	Panel Discussion: Addressing Technology Challenges While Developing the Next Generation of
	Hardware Security Workforce
	Closing Remarks
03:25pm-03:30pm	Closing Remarks