

Dr. Shawn Blanton Biography

Dr. Shawn Blanton is currently the Associate Department Head for Research, and the Joseph F. and Nancy Keithley Professor of Electrical and Computer Engineering at Carnegie Mellon University. He is the founder and director of the Advanced Chip Test Laboratory (ACTL), where Dr. Blanton and his students develop and implement design methodologies and associated data-mining techniques for improving the fabrication, operation, security and test of integrated systems. He and students have over 200 publications and patents across these areas. Dr. Blanton is the founder and CEO of TestWorks, a Carnegie Mellon spin-off company focused on information extraction from IC test data. He has collaborated with and consulted for a number of major semiconductor companies including, for example, Intel, Google, IBM, Qualcomm, NXP, Xilinx, Infineon, GlobalFoundries and Nvidia. His latest research on test-chip design for yield learning has been used by several semiconductor companies and is now licensed for commercial use by a major US chip producer. Dr. Blanton has served as a Visiting Professor with AT&T Bell Labs, Intel, Motorola, Hewlett Packard, and the University of Tokyo, selected for multiple Faculty Partnership and Fellowship awards from IBM and Qualcomm, respectively, and is a Fellow of the IEEE.

Dr. Blanton is also significantly involved in diversifying and mentoring the faculty and graduate students of Carnegie Mellon. As Acting Associate Dean for Diversity and Inclusion in the College of Engineering (2019-20), he co-wrote and implemented the college's diversity, equity and inclusion plan that led to the hiring of six tenure-track faculty of color, and a 5X improvement in the number of graduate students of color (from approximately 20 students to over 100). He also established and chaired the diversity committees for both the Department of Electrical Engineering and the College of Engineering, and helped develop a dual-degree PhD program with Howard University. As Carnegie Mellon's Interim Vice Provost for Diversity, Equity and Inclusion (2020-21), Dr. Blanton expanded the engineering graduate-student and faculty recruiting programs to the other university colleges, participated in every college's search for an Associate Dean for DEI, including the search for the permanent VP for DEI, helped formulate and administer a target opportunity fund for hiring diverse, senior-level faculty, and directed the development of a DEI dashboard for the Carnegie Mellon community.

As the director of ACTL, Dr. Blanton has advised over 50 undergraduate researchers, many of which have gone on to earn graduate degrees here at Carnegie Mellon and other institutions such as The University of Michigan and Stanford. Sponsorship for many of these undergraduate researchers stemmed from one of the 22 Research Education for Undergraduate awards received by Dr. Blanton from the National Science Foundation. For his diversity work over the years, in 2006, Dr. Blanton received the Emerald Award from Science Spectrum magazine for "outstanding leadership in recruiting and mentoring minorities for advanced degrees in science and technology," and in 2021, he received the Outstanding Mentoring Award in the Carnegie Mellon University, College of Engineering.