

Nandi O. Leslie *05 (PACM)
Bethesda, MD

Graduate Alumni Trustee Candidate

Now at Raytheon Technologies, Nandi Leslie shares the story of her 5th grade year when she lived in Princeton for a semester while her father was on sabbatical at the Institute for Advanced Study. She would tag along with him to lectures and gatherings at his colleagues' homes, fascinated by their conversations and the world of the University. Ten years later, she was an undergraduate mathematics student at Howard University presenting at a conference, where a Princeton professor suggested that Leslie apply to the Graduate School to earn a doctorate in the Program in Applied and Computational Mathematics. "I jumped at the opportunity to reconnect with the community that had inspired me from childhood," she says.

While a student, Leslie served as a consultant for two non-governmental organizations, Woods Hole Research Center and Conservation International, conducting modeling and simulation research related to forest conservation. When she received her degree from Princeton, her experiences with the NGOs had ignited a commitment to community outreach and service which continues to this day in tandem with her professional life.

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After Princeton, Leslie taught mathematics at the University of Maryland, where she was a postdoctoral researcher supported by the National Science Foundation. She then went on to Systems Planning and Analysis in Alexandria, VA, for eight years, leading projects for the U.S. Navy and the Office of the Secretary of Defense as program manager and senior analyst. During that time, she co-founded The College Advocate, a nonprofit organization providing college prep

and a pipeline for low-income high school students to achieve college success. With funds raised from grants as well as with support from fellow Princeton alumni Leslie had engaged at the 2009 conference for Black Princeton Alumni, the program provided services for 60 students a year.

In 2015, Leslie joined Raytheon, the \$148 billion defense and aerospace business, and currently serves as a Principal Technical Fellow, the company's highest honor. She is the first African American female to hold this position, which requires her to wear multiple hats: researcher and leader on a portfolio of projects ranging up to \$2.5 billion related to AI, machine learning, and cybersecurity as well as Chief Data Scientist, Chief Engineer for R&D, and Director for Cybersecurity. She is published in numerous journals and has edited books and conference proceedings for many organizations, including NATO. She also appears regularly on industry panels. She serves on scientific advisory boards, international society committees, and conference committees and subcommittees, including the President's National Security Telecommunications Advisory Committee. The awards and honors for her technical contributions include the 2020 Black Engineer of the Year Award for Outstanding Technical Contribution in Industry. She is regularly featured in journals, online and print, as a model for women in STEM and Tech.

Leslie is an advisory board member for the DoD Center of Excellence in Artificial Intelligence and Machine Learning at Howard University. And she still teaches. She is an adjunct professor and research advisor for the Applied and Computational Mathematics Master's Program at Johns Hopkins University, and a Visiting Professor and Research Advisor to MA degree students at the African Institute for Mathematical Sciences in Senegal. She frequently participates in

workshops with graduate students at Princeton, and recently participated in a panel under the auspices of Princeton in Washington. She notes that academic work has given her “the opportunity to shape the experiences of passionate young mathematicians.”

Leslie also volunteers monthly at the Maryland Department of Juvenile Services with the Kingdom Fellowship AME Church Prison Ministry, providing girls between the ages of 12 and 17 years old with tools for self-improvement. She credits her exposure to Princeton with helping to drive her desire “both to be a servant for the community’s good and to contribute to impactful R&D in the mathematical sciences.”