

# Donald Richardson

**Hometown:** Bowie, MD

**Status:** PhD Student

**Department:** Industrial and Operations Engineering

**Undergraduate Institution and Major:** University of Maryland Baltimore County (UMBC), B.S. Mathematics

**Current Activities/Hobbies:** CrossFit Training, Obstacle course runs, anything water related, and playing piano

**Involved with NSBE in the past?:** I was involved with NSBE in my undergrad. I volunteered to help serve food at sports events as well as volunteered to help grade schools kids in the First Lego League Competition.

**Why did you choose to attend Graduate School?:** I was fortunate enough to be apart of the Meyerhoff Scholars program at UMBC. Here I was first exposed to research and encouraged to participate in both on-campus and summer research opportunities. Also during my tenure at UMBC, I was able to tutor, teach, and mentor younger students. I knew from these experiences in mentorship programs and teaching experiences that my future endeavors would involve helping others. In 2013 I took part in the SROP program here at UM. Here I learned the importance of the collaboration between engineers and medical professionals in order to help ensure safe and timely patient care. After this experience, I knew I wanted to continue pursuing graduate studies to further enhance my engineering skills, specifically with applications in healthcare. My passion for research will coincide with my passion for mentorship as I matriculate through my newfound academic career.

**Research summary:** In collaboration with the University of Michigan Comprehensive Cancer Center, we continue to develop a data-driven, optimization-based approach to improving the timeliness of drug preparation for chemotherapy infusion patients while reducing staff workload and improving resource utilization.

**Career goals:** I'm currently interested in working in the healthcare industry continuing to help improve the delivery and efficiency of patient care. I also am particularly interested in helping increase the participation of minorities in STEM. I will be able to pursue a career of mentoring and performing scholarly operations research that has the potential to positively impact other engineers, healthcare professionals, and patients.