Sanjukta Bhanja earned her bachelor's degree in electrical engineering from Jadavpur University in Calcutta in 1991, and her master's degree from the Indian Institute of Science in Bangalore in 1994. In 2002, she completed her PhD in Computer Science and Engineering from the University of South Florida in Tampa. Currently, she is a professor in the Department of Electrical Engineering at the University of South Florida.

Since FY'2021, Bhanja has been serving as the Executive Associate Dean for the College of Engineering. As the dean's designee for internal affairs, her portfolio includes faculty affairs: including faculty hires, tenure and promotion, fiscal analysis and planning, resource management, HR, facilities and space, and college-wide support services and units.

From 2017 to 2021, Bhanja served as the Associate Dean for Academic Affairs (ADAA). During this time, she contributed to various initiatives, including interweaving communication in technical courses throughout the curriculum, creating a design thinking course for first-year engineering students, launching a preparatory math course for summer admits who lacked math preparation in high school, and seamlessly transitioning to remote, hybrid, and face-to-face course delivery during the COVID pandemic. She also played a key role in securing ABET and other accreditation certifications and co-founded the Academy of Distinguished Engineering Educators (ADE2) to promote educational leadership and excellence.

Bhanja's research focuses on VLSI, nano-electronics, and applied physics and is externally sponsored by the National Science Foundation and NASA. She is currently (FY23) the Principal Investigator of research awards totaling approximately four million dollars sponsored by the National Science Foundation. She has graduated 12 PhD students who have gone on to work in high-tech industries and is currently advising four doctoral students, three of whom are women or minorities. Her creative works are published in top-tier peer-reviewed journals and conferences, including high-impact journals such as Nature Nanotechnology.

Sanjukta Bhanja has served as an Associate Editor for the IEEE Transactions on VLSI Systems and the ACM Journal on Emerging Technologies in Computing Systems. She has also been a part of the Technical Program Committees (TPC) for various IEEE and ACM conferences and has held leadership positions as TPC Co-Chair and General Co-Chair for ACM GLSVLSI and IEEE ISVLSI. She joined the standing steering committee of ACM GLSVLSI in 2013 and IEEE ISVLSI in 2015.

Bhanja organized a conference on "Field-coupled Nano-computing" in 2013, which was sponsored by the National Science Foundation and brought together researchers to evaluate progress in field-coupled computing. In 2014, she organized a discipline-specific workshop on diversity issues in design automation for emerging technology, which was sponsored by CRAW/CDC/NSF.

Bhanja has received several awards for her research and teaching, including the New Researcher Award from the University of South Florida in 2002, the NSF CAREER Award in 2007, the USF Tau Beta Pi "Outstanding Engineering Faculty Researcher" award in 2007, the USF "Outstanding Faculty Research Achievement Award" in 2008, the USF Outstanding Undergraduate Teaching Award in 2010, and the Florida Education Foundation (F.E.F) William Jones Outstanding Mentor Award in 2010. She also received an honorable mention award for Outstanding Graduate Faculty Mentor in 2013. Bhanja was selected and certified as an Executive Leadership Fellow in the Academic Technology, Engineering, and Science (ELATES at Drexel®) program for 2020-2021.