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 Nationalisaerindenano