Engineering Research Visioning Alliance – what is it and why I should engage with it?

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Dorota Grejner-Brzezinska

Dorota A. Grejner-Brzezinska is the University Distinguished Professor, Lowber B. Strange Endowed Chair and Professor in the Department of Civil, Environmental and Geodetic Engineering. She is the Vice President for Knowledge Enterprise in The Ohio State University (OSU) Enterprise for Research, Innovation and Knowledge. She is also a Director of the Satellite Positioning and Inertial Navigation (SPIN) Laboratory. Her research interests cover GPS/GNSS algorithms, GNSS/inertial and other sensor integration for navigation in GNSS-challenged environments, sensors and algorithms for indoor and personal navigation, image-based navigation using artificial intelligence (AI) methods, and mobile mapping.

Dr. Brzezinska is a member of the National Academy of Engineering (NAE), Fellow of the American Association of the Advancement of Science (AAAS), Fellow of the Institute of Navigation (ION), Fellow of the Royal Institute of Navigation (RIN), and the recipient of the 2016 ION Johannes Kepler Award, the 2005 ION Thomas Thurlow Award, the 2005 and 2015 United States Geospatial Information Foundation (USGIF) Academic Research Award, and the 2018 International Association of the Institutes of Navigation (IAIN) John Harrison Award. She served as President of the Institute of Navigation (2015-2017), and President of the International Association of Geodesy (IAG) Commission 4, Positioning and Applications (2011-2015), and is an IAG Fellow. Dr. Brzezinska is the Principal Investigator for the newly established National Science Foundation (NSF) Engineering Research Visioning Alliance (ERVA) and has recently been appointed to the National Science Board (NSB).

Dr. Brzezinska holds an M.S. and a Ph.D. in Geodetic Science from The Ohio State University, and an M.S. in Surveying Engineering and Land Management Systems from the University of Warmia and Mazury, Poland.

Abstract of the talk

The Engineering Research Visioning Alliance (ERVA) is an ideation platform and a neutral convener that helps identify and develop bold and transformative new engineering research directions, directly supporting the nation’s ability to compete in a rapidly changing global economy. Funded by the National Science Foundation (NSF) Directorate for Engineering, ERVA is a diverse, inclusive, and engaged partnership that enables an array of voices to impact national research priorities. The five-year initiative convenes, catalyzes, and empowers the engineering community to identify nascent opportunities and priorities for engineering-led innovative, high-impact, cross-domain, fundamental research that addresses national, global and societal needs. Learn more at https://www.ervacommunity.org.

Dorota will briefly talk about her research career at The Ohio State University, her transition to academic leadership and finally, to the national-level research leadership. Leading ERVA is a perfect example of how successful, team-based, and highly interdisciplinary research in Positioning, Navigation and Timing enables a transition to much broader research scope and focus on engaging all the engineering disciplines in addressing the most vexing societal problems.