Afroditi V. Filippas, Ph.D.

Professor at Electrical and Computer Engineering

Richmond, VA, US

Professor Filippas is VCU?s representative to CCAM. Her research focuses on Smart Manufacturing, Data Analytics, and Modeling.

Biography

Professor Filippas earned her Diploma in Electrical Engineering from the University of Patras in Greece and her M.S. and Ph.D. degrees from the University of Texas at Austin (1993). After working as a post-doctoral researcher at the Institute of Accelerating Systems and Applications, Professor Filippas worked in the microwave and rf simulation and design software industry for a number of years; in 2004, she joined the VCU College of Engineerin, Department of Electrical and Computer Engineering. In 2008, she was named Associate Chair of the Electrical and Computer Engineering Department and in 2010 as the Associate Dean for Undergraduate Studies for the VCU College of Engineering. During this time, Professor Filippas developed and fostered unique undergraduate experiences, such as the da Vinci program and VIP (Vertically Integrated Projects). She also served as mentor to a number of student organizations, and continues to serve as the faculty advisor to the VCU Society of Women Engineers (SWE) and HKN. In 2019, Professor Filippas also took on the role of joint chapter chair of the IEEE Education Society, Richmond and Northern Virginia Chapters. Professor Filippas is currently (since 2019) the VCU College of Engineering's representative to the Commonwealth Center for Advanced Manufacturing (CCAM - https://ccam-va.com/). Her research focuses on Smart Manufacturing, Data Analytics, and Modeling. Dr. Filippas is also very highly engaged in teaching and educational research. Current projects include the NSF-funded SUMMIT-P: A National Consortium for Synergistic Undergraduate Mathematics via Multi-institutional Interdisciplinary Teaching Partnerships (https://www.summit-p.com/). This is a consortium of eleven institutions collaborating to revise and improve the curriculum for lower division undergraduate mathematics courses. Dr. Filippas? research background in Microwave and RF component analysis and design has informed her innovative approach to teaching electromagnetics; emphasis is placed on simulating real-world situations and developing images and animations that help students immerse themselves in the study of this fascinating topic.

Industry Expertise

Education/Learning, Research

Areas of Expertise

Electromagnetic Device Modeling, Data Analytics, Higher Order Statistical Analysis, Multimodal Data Analytics, Experimental Design, Smart Manufacturing

Affiliations

IEEE : Senior Member

Education

University of Patras
Diploma Electrical Engineering

University of Texas
M.S.E. Electrical Engineering

University of Texas
Ph.D. Electrical Engineering
