



Dr. Apurva N. Mody
Founder and CEO, AiRANACULUS
IEEE Fellow

Dr. Apurva N. Mody is a world recognized expert on Spectrum Sharing and Spectrum Exploitation Technologies. Dr. Mody received his Ph. D. in Electrical Engineering from Georgia Institute of Technology in December 2004. In 2022, Dr. Mody was elevated to the rank of the Fellow of the Institute of Electrical and Electronics Engineers (IEEE) for his contributions on Cognitive Dynamic Spectrum Sharing and Standards.

In the recent past, Dr. Mody has served as the Vice Chair and Chairman of the National Spectrum Consortium (NSC). As a Member of the Executive Committee, Dr. Mody is acting as the Working Groups Chairman to create interoperable specifications, recommended practices, white papers and study reports in the area of Spectrum and 5G.

Dr. Mody has more than 20 years of experience in Research and Development (R&D) of wireless communications, radars, Electronic Warfare (EW) and systems related to Spectrum Dominance Awareness and Sharing. Dr. Mody has worked on countless Department of Defense (DoD) Programs as a Principal Investigator, Program Manager and as a Capture Team Lead. These programs have resulted in development of potential solutions for radar and communications spectrum sharing, development of spectrum sensing chip, anti-jam wireless communications solutions, co-existence between communications and electronic warfare systems, as well as implementation of low-cost techniques to make any radio cognitive. Dr. Mody was one of the first researchers to talk about the effective use of not only the White Space, but also the Gray Space.

Dr. Mody founded [AiRANACULUS](#) in 2019 which is at the forefront in Intelligent RF and Networking Solutions for applications ranging from Space to Smart Cities. The company has assembled the world's leading experts to provide algorithms, reference architectures and products in signal processing, cross-layer analysis, cybersecurity, and networking to create spectrum aware technologies capable of re-configuring radio and sensor systems for optimal performance in congested and contested environments. AiRANACULUS is working on wide variety of Projects including creation of Cognitive Control Plane and Network Slicing for NASA's Moon Mission, 5G Dynamic Spectrum Sharing, Learning-enhanced Decision Engine, Interference Cancellation, RF Machine Learning and Anomaly Detection and Characterization.

Dr. Mody is also the founding Chairman of the [WhiteSpace Alliance™](#) (WSA) as well as the Chairman Emeritus of [IEEE 802.22 Working Group](#) (WG) for Wireless Regional Area Networks (WRANs). Dr. Mody was awarded the IEEE SA Medal for creating spectrum sharing technologies to reduce the global problem of Digital Divide. Under his leadership, the IEEE 802.22 WG is the recipient of the IEEE Emerging Technology Award. Dr. Mody, also led the IEEE 802.22.3 / 802.15.22.3 Task Group on Spectrum Characterization and Occupancy Sensing. Dr. Mody has access to regulators and Government officials all over the world. He has worked with many Government organizations including United States DoD, NTIA, FCC, Department of State, USAID, United Nations, International Telecommunications Union as well as Ministries of many countries around the world.

Dr. Mody is the Fellow of the IEEE, he was President's Fellow while at Georgia Tech, he is a member of IEEE Eta Kappa Nu and Tau Beta Pi honor societies. His research work has been published in three book chapters and more than 50 Conference and Journal Papers. Dr. Mody has been awarded more than 25 patents.