

Cajetan M. Akujuobi, M.B.A., Ph.D.E.E. - Biography

Dr. Akujuobi has done extensive work in the area of mixed signal systems research and has extensive experience working in industry (Texas Instruments and Advanced Hardware Architecture) in the areas of mixed signal design and testing. He has developed and taught several courses in mixed signal systems both at the undergraduate and graduate levels. He has completed several projects using wavelets for corporations and government agencies. A few selected completed projects are as follows: (i) Study of the Wavelet Transform-Based Testing of Analog-to-Digital Converters (ADCs) with a view to improving mixed-signal testing techniques from conventional methods, (sponsored by Texas Instruments); (ii) Development of ADC Automated Testing Using LabView Software, (sponsored by Texas Instruments); (iii) Development of a Wavelet-Based Algorithm for Vibration Detection of an Aeroelastic System (sponsored by NASA) and (iv) Wavelet-Based Algorithm Development Research into the Detection, Discrimination and Parameter Estimation of Signals for AMRTD Systems (sponsored by Northrop Grumman).

He is the founding Director of the Analog & Mixed Signal (AMS), DSP Solutions and High Speed (Broadband) Communication Programs at Prairie View A&M University. He is also the founding Director of the Center of Excellence for Communication Systems Technology Research (CECSTR). He is a Professor of Electrical & Computer Engineering and Head, Engineering Technology Department. Dr. Akujuobi has over 25 years experience in engineering education, research and development. He has demonstrated expertise in digital signal & image processing, design, analysis, testing and evaluation of systems, networks and communications engineering for major international and national organizations.

His current research interests include mixed signal communication systems & emerging technologies and mixed signal algorithm development for testing and design, DSP solutions, wireless, all areas of signal and image processing, high-speed communication systems (Broadband Telecommunications) using such tools as wavelet and fractal transforms. Dr. Akujuobi has taught as a university faculty and researcher in numerous private and state universities. He was a participant and collaborative member of ANSI T1E1.4 Working Group which has the technical responsibility during the development of T1.413, Issue 2 ADSL Standard. Dr. Akujuobi represented Advanced Hardware Architecture (AHA) in ANSI, ITU, IEEE and ETSI standard organizations when he was working with AHA. He belongs to many professional organizations such as IEEE, ISA (Senior Member), ASEE, SPIE, and Sigma XI, the Scientific Research Society.

He has chaired many technical conference sessions on wavelets, signal and image processing, and digital systems. He has been published extensively and has also written many technical reports in the areas of wavelet analysis, signal/image processing, and communications. He has presented research publications to ASEE, IEEE, ISA, IASTED, modeling and simulation conferences, Bell Labs, Schlumberger Research Center, Argonne National Laboratory and NASA Langley Research. Dr. Akujuobi has a National Diploma (OND) in Electrical and Electronics Engineering, BSEE, MSEE, MBA and a Ph.D. in Electrical Engineering. He is listed in Who's Who in Science and Engineering, Who's Who in the World, Who's Who in America, Who's Who in American Education and Who's Who in Industry & Finance.