Expertise in Biomedical Engineering:

He has excellent background in this area. His MS thesis was on Cell Electrophoresis. His doctoral research was on Early and Noninvasive Detection of Atherosclerosis, the cause behind heart attacks and strokes. Vasocor In., a company in Miami, FL, licensed Dr. Shankar's patents. Several news paper articles have been published on this. Vasocor recently completed 3 clinical validation studies and has since then obtained FDA approval for the method. FAU Research Corporation has received $ 1 million in royalties. He also coordinated the effort to evolve a unique bioengineering undergraduate program that will bring together bioinformatics and biotechnology expertise in the college of science's Center for Molecular Biotechnology and Bioinformatics, CMBB, with the engineering expertise in the college of engineering. He was the Director for Research of Vasocor Inc., during his Sabbatical in 1993. The $1M biomedical imaging and instrumentation project involved 34 engineering and computer science graduate students and professionals. Dr. Shankar also taught regular and continuing education courses on medical instrumentation during his stay at Madison, WI. He is a Fellow of the Arteriosclerosis Council of the American Heart Association (AHA).

Research in Biomimetics, an area that combines VLSI, EDA, and Biomedical Engineering:

Dr. Shankar's background in the medical field and VLSI has led to innovative biologically inspired architectures for optical character recognition, image recognition, and speech recognition. These are collaborative projects with Dr. Abhi Pandya, Mr. Kaiyu Wu, and Dr. Ray Barrett. His related research expertise is in analog, digital, and neural VLSI, physiological modeling, instrumentation and sensors, and MEMS (microelectromechanical systems).