Mahesh R Panicker
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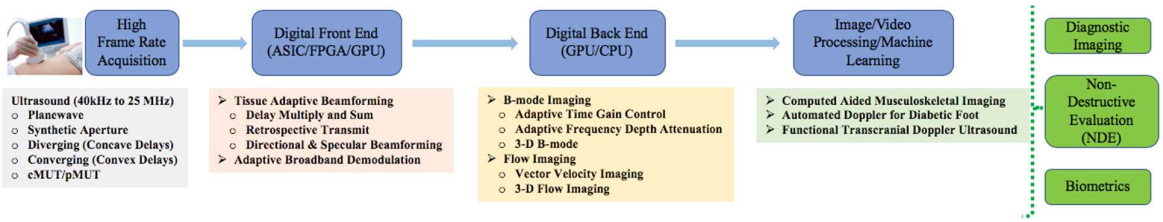
Research Interests

- Digital Signal Processing
- Ultrasound Imaging
- VLSI Signal Processing Circuits and Systems
- Machine/Deep Learning for Imaging/Reconstruction

Brief Summary of Research

Mahesh has published 33 research papers in refereed international journals and conferences, and holds 10 US patents. Prior to joining academia, he has over 9 years of industrial experience with GE Global Research and Samsung Research. His research interests include algorithms and architectures for medical imaging systems particularly ultrasound imaging with specific interests in software and hardware beamforming. He is also interested in Active/Passive Sensing including Non-destructive Evaluation (NDE) signal processing. He is six sigma green belt certified and TRIZ practitioner. He is a Senior Member of IEEE.

Overview of Ultrasound Imaging Research



Projects

- "Investigation of a portable, affordable and self-guided bedside ultrasound system for tissue and blood velocity imaging", Early Career Research (ECR) award, Science and Engineering Research Board (SERB), Rs 49,01,830, March 2019 - March 2022 (Principal Investigator)

Recent Publications (https://scholar.google.com/citations?user=FkF8Zh0AAAAJ&hl=en)

- Panicker, Mahesh R., et al. "Method and system for measuring a volume of an organ of interest." U.S. Patent Application No. 15/703,377. (https://patents.google.com/patent/US20180085043A1)
- Mahesh, R., P. Bhushan, Ek Tsoon Tan, J. Suresh, M. Radhika, M. Luca, M. Rakesh, "Improving neighbourhood voxel correlation in resting state fMRI using BOLD signal decomposition," in Proc. of OHBM 2016, Geneva, Switzerland, June 2016.
- Mahesh, R.,s and A. Prasad Vinod. "A low-complexity flexible spectrum-sensing scheme for mobile cognitive radio terminals." *IEEE Transactions on Circuits and Systems II: Express Briefs* 58.6 (2011): 371-375.