

Centre for Quantitative Medicine

The CQM Seminar Series presents: Mobile Friendly Deep Learning Algorithms for Medical Image Analysis

Date: 14th October 2022, Friday

Time: 2.00 pm - 3.00 pm

Register Here https://tinyurl.com/14Oct22



* Free Webinar via Zoom

Abstract

Light-weight Convolutional Neural Networks (CNNs) are mobile friendly models that can provide inference without the need for any specialised hardware. These models can be very effective in point-of-care settings, where the detection of disease has to be performed in real-time. The talk will highlight few developments of Medical Imaging Group (MIG) at Indian Institute of Science, especially towards COVID19 management and diagnosis. Deployment of these lightweight networks on embedded platforms to show high versatility as well as prove optimal performance in terms of being accurate will also be highlighted. The developed models having latency in the same order as other lightweight networks without compromising the accuracy will also be shown.

Speaker



Prof Phaneendra Yalavarthy received B.Sc. and M.Sc. degrees in physics from Sri Sathya Sai University, Puttaparthy, India in 1999 and 2001 respectively. He also obtained a M.Sc. degree in Engineering from Indian Institute of Science, Bangalore, India in 2004. He received a Ph.D., working as a U.S. Department of Defense Breast Cancer Pre-doctoral Fellow, in biomedical computation from Dartmouth College, Hanover, USA in 2007. He worked as a post-doctoral research associate in the Department of Radiation Oncology, School of Medicine, Washington University in St. Louis, USA from 2007-2008. Currently, he is working as a Professor in the Department of Computational and Data Sciences, Indian Institute of Science, Bangalore, India.