

Research Interests

Image and Video Signal Processing, Deep Video Prediction: Applications and Evaluation, Computer Vision, Machine Learning

Education

Ph.D. - Indian Institute of Science (IISc), Bengaluru Aug 2018 - Present
Dept of Electrical Communication Engineering

- ◊ Advisor : Dr. Rajiv Soundararajan
- ◊ CGPA : 9.59

B.E. - PES Institute of Technology, Bengaluru Aug 2012 - May 2016
Dept of Electronics and Communication Engineering

- ◊ CGPA : 9.93 (Gold Medallist)

Class XII : 96% (District Topper) 2012
Class X : 96.8% (District Topper) 2010

Course Work

Mathematics : Linear Algebra, Probability, Optimization
Electrical : Digital Image Processing, Digital Video: Perception and Algorithms, Computer Vision, Machine Learning for Signal Processing, Detection and Estimation Theory

Computer Skills

Programming Languages : Java, Python, Android, MATLAB
Platforms : Windows, LINUX, MacOS
Softwares : \LaTeX

Professional Experience

- ◊ **PES University**, Visiting Faculty Jan 2021 - May 2021
- ◊ **Indian Institute of Science (IISc)**, Teaching Assistant Oct 2020 - Present
- ◊ **Cisco Systems India Pvt Ltd**, Software Engineer Aug 2016 - Jul 2018
- ◊ **Elseem Inc.**, Research Intern Jun 2015 - Jul 2015

Publications

- ◊ Nagabhushan Somraj, Manoj Surya Kashi, S. P. Arun, and Rajiv Soundararajan. Understanding the perceived quality of video predictions. *arXiv e-prints*, page arXiv:2005.00356, 2021 - Under review at Signal Processing Image Communication journal.
- ◊ Vijayalakshmi Kanchana, Nagabhushan Somraj, Suraj Yadwad, and Rajiv Soundararajan. Revealing disocclusions in temporal view synthesis through infilling vector prediction. In *IEEE Winter Conference on Applications of Computer Vision (WACV)*, 2022 - To appear in WACV 2022.

Projects

- ◊ **Face Detection using Aggregate Channel Features** 2019
- ◊ **Image Mosaicing (Panorama)** 2019
- ◊ **Intra-Campus Wi-Fi Calling System** with Voice Activity Detection 2016
- ◊ **Android Apps**: Finance Manager, One Touch Settings 2014–17

Honors & Awards

- ◇ Recipient of Prime Minister's Research Fellowship (PMRF), 2020.
- ◇ Recipient of MHRD scholarship (Govt of India) for all 4 years of B.E.