Nagabhushan S N

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https://nagabhushansn95.github.io/

Research Interests

3D Computer Vision, Deep Video Prediction: Applications and Evaluation, Image and Video Signal Processing, 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 (PMRF Fellow)

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, Computer Vision, Machine Learning for Signal Processing, Digital Video Processing, Detection and Estimation Theory

Professional Experience

- ◇ **PES University**, Visiting Faculty Jan 2021 - May 2023
- ◇ **Indian Institute of Science (IISc)**, Teaching Assistant Oct 2020 - May 2022
- ◇ **Cisco Systems India Pvt Ltd**, Software Engineer Aug 2016 - Jul 2018
- ◇ **Elseem Inc.**, Research Intern Jun 2015 - Jul 2015

Publications

- ◇ Nagabhushan Somraj, Adithyan Karanayil, and Rajiv Soundararajan. SimpleNeRF: Regularizing sparse input neural radiance fields with simpler solutions. Conditionally accepted in ACM SIGGRAPH-Asia 2023 Conference Proceedings, Sydney, Australia.
- ◇ Nagabhushan Somraj and Rajiv Soundararajan. ViP-NeRF: Visibility prior for sparse input neural radiance fields. In *ACM Special Interest Group on Computer Graphics and Interactive Techniques (SIGGRAPH)*, 2023.
- ◇ Nagabhushan Somraj, Pranali Sancheti, and Rajiv Soundararajan. Temporal view synthesis of dynamic scenes through 3d object motion estimation with multi-plane images. In *IEEE International Symposium on Mixed and Augmented Reality (ISMAR)*, 2022.
- ◇ Nagabhushan Somraj, Manoj Surya Kashi, S. P. Arun, and Rajiv Soundararajan. Understanding the perceived quality of video predictions. *Signal Processing: Image Communication (SPIC)*, 102:116626, 2022.
- ◇ 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.

Projects

- ◇ **Intra-Campus Wi-Fi Calling System** with Voice Activity Detection 2016

Updated on August 30, 2023

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.