Sharath Girish

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EDUCATION

University of Maryland, College Park   **August 2019 - Present**
PhD. in Computer Science   GPA: 4.0/4.0
Advisor: Prof. Abhinav Shrivastava

Indian Institute of Technology Madras, India   **August 2015 - May 2019**
B.Tech. in Electrical Engineering   GPA: 9.04/10

PUBLICATIONS

NIRVANA: Neural Implicit Representations of Videos with Adaptive Networks and Autoregressive Patch-wise Modeling
Shishira R Maiya*, *Sharath Girish*, Max Ehrlich, Hanyu Wang, Kwot Sin Lee, Patrick Poirson, Pengxiang Wu, Chen Wang, Abhinav Shrivastava
Under review

LilNetX: Lightweight Networks with EXtreme Model Compression and Structured Sparsification
Sharath Girish, Kamal Gupta, Saurabh Singh, Abhinav Shrivastava
To appear at International Conference on Learning Representations (**ICLR**), 2023

Moving Beyond Handcrafted Architectures in Self-Supervised Learning
Sharath Girish, Debadeepta Dey, Neel Joshi, Vibhav Vineet, Shital Shah, Caio Cesar Teodoro Mendes, Abhinav Shrivastava, Yale Song
Under review

Towards Discovery and Attribution of Open-world GAN Generated Images
*Sharath Girish**, Saksham Suri*, Saketh Rambhatla, Abhinav Shrivastava
IEEE International Conference on Computer Vision (**ICCV**), 2021

The Lottery Ticket Hypothesis for Object Recognition
*Sharath Girish**, Shishira R Maiya*, Kamal Gupta, Hao Chen, Larry Davis, Abhinav Shrivastava
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2021

A Unified Learning-Based Framework for Light Field Reconstruction From Coded Projections
Anil Kumar Vadathya, *Sharath Girish*, Kaushik Mitra
IEEE Transactions on Computational Imaging (**TCI**), 2019

Unconstrained Motion Deblurring for Dual-lens Cameras
Mahesh Mohan MR, *Sharath Girish*, AN Rajagopalan
Proceedings of the IEEE International Conference on Computer Vision (**ICCV**), 2019 (**Oral**)

A Deep Learning Framework for Light Field Reconstruction From Focus-Defocus Pair: A minimal hardware approach
Anil Kumar Vadathya, *Sharath Girish*, Kaushik Mitra
Computational Cameras and Displays Workshop, **CVPRW** 2018

PROFESSIONAL EXPERIENCE

Research Intern, Microsoft Research   **May 2021 - August 2021**
Mentor - Dr. Yale Song, Dr. Debadeepta Dey
Worked on application of Neural Architecture Search on Self Supervised Learning

Graduate Research Assistant, University of Maryland   **May 2020 - Present**
Mentor - Prof. Abhinav Shrivastava
Working on Open World Image Attribution and Model Compression for Object Recognition

Graduate Research Assistant, University of Maryland   **August 2019 - May 2020**

Mentor - Prof. Rama Chellappa

Worked on Activity Recognition by splitting models based on input video modalities or output activity types
to improve performance.

PhD Coursework

Algorithms in Machine Learning : Guarantees and Analyses, Deep Learning, Advanced Numerical Optimization,
Statistical Pattern Recognition, Advanced Techniques in Visual Learning and Recognition

Achievements

- **Dean's Fellowship** awarded by the University of Maryland, 2019
- **All India Rank - 274** in JEE-Advanced 2015, taken by 1.3 million students (top 0.02%)
- Awarded **KVPY** scholarship in 2014 and the **NTSE** scholarship in 2013 by Government of India