

Sudhir Yarram

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RESEARCH INTERESTS	My research focuses on designing video perception and forecasting models for autonomous systems that will enable autonomous systems to <i>perceive</i> and <i>forecast</i> in the real world just as humans are able, and ultimately surpass humans ability to forecast.
EDUCATION	University at Buffalo, USA Doctor of Philosophy, Computer Science and Engineering Aug 2019 - present Advisor: Prof. Junsong Yuan Thesis Committee: Prof. Junsong Yuan, Prof. Chunming Qiao, Prof. Vishnu Lokhande International Institute of Information Technology, Hyderabad India <i>Bachelor of Technology</i> , Computer Science and Engineering, Jul 2011 - Jul 2015 GPA: 8.08/10 (Overall)
SELECTED WORK EXPERIENCE	Adobe, MDSR Research Team <i>Research Intern, with Mausoom Sarkar and Balaji Krishnamurthy</i> Summer 2024 A novel approach to text-to-video generation. Amazon Go Team <i>Research Intern, with Dr. Tian Lan, Dr. Hui Liang, and David Acuna</i> Summer 2021 Referring Video Object Segmentation Amazon Go Team <i>Applied Scientist Intern, with Dr. Tian Lan and Dr. Hui Liang</i> Summer 2020 Domain Adaptation for Referring Video Object Segmentation Adobe Systems <i>Member of Technical Staff , with Vikas Jain</i> 2016 - 2018 Owner of the Predictive Creativity app, an animation app that simplifies the repetitive process using machine learning algorithms. Bangalore, India
PUBLICATIONS	Sudhir Yarram , Naresh Kumar Devulapally, Vibhav Vineet, Vishnu Suresh Lokhande, Junsong Yuan, FlowReg: Sparse-View Synthesis in Driving Scenes Using Gaussian Splatting and Optical Flow, 2024. (In submission) Sudhir Yarram , Junsong Yuan, Forecasting Future Videos from Novel Views via Disentangled 3D Scene Representation, in <i>European Conference on Computer Vision (ECCV)</i> , 2024. [pdf] Sudhir Yarram , Ming Yang, Junsong Yuan, “Adversarial Structured Prediction for Domain Adaptive Semantic Segmentation”, in <i>Machine Vision and Applications (MVA)</i> , 2022. [pdf] Jialian Wu, Sudhir Yarram , Hui Liang, Tian Lan, Junsong Yuan, Jayan Eledath, and Gerard Medioni, “Efficient Video Instance Segmentation via Tracklet Query and Proposal”, in <i>IEEE Conference on Computer Vision and Pattern Recognition (CVPR)</i> , 2022. [pdf] Sudhir Yarram , Jialian Wu, Pan Ji, Yi Xu, Junsong Yuan, “Deformable VisTR : Spatio temporal deformable attention for video instance segmentation”, in <i>IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)</i> , 2022. [pdf] Sudhir Yarram , Ming Yang, Junsong Yuan, Chunming Qiao, “Joint Global-Local alignment

for domain adaptive semantic segmentation”, in *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, 2022. [\[pdf\]](#)

Ashutosh Mishra*, **Sudhir Yarram***, Tarun Kalluri*, Manmohan Chadraiker, C.V.Jawahar, “Semantic Segmentation Datasets for Resource Constrained Training”, in *IEEE National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics (NCVPRIPG)*, 2019. [\[pdf\]](#)

Sudhir Yarram, Girish Varma, C.V. Jawahar “City-scale Road Audit using Deep Learning”, in *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2018. [\[pdf\]](#)
Finalist for IROS JTCF Novel Technology paper award ([certificate](#))

AWARDS & HONORS

Graduate Research Award at **University at Buffalo**, 2023.

IROS JTCF Novel Technology paper award Runner-up, **IROS**, 2018.

Nominee for Young Achievers Award, **Adobe Systems**, 2016.

Secured 534th rank in All India Engineering Examination (AIEEE) 2011 (>150k applicants)

PROFESSIONAL SERVICES

Conference Reviewing

Computer Vision and Pattern Recognition Conference

2020 - 2023

International conference on computer vision

2021, 2023

European Conference on Computer Vision

2022, 2024

Journal Reviewing

IEEE Transactions on Pattern Analysis and Machine Intelligence

2023

SKILLS

Python, C, C++, PyTorch