Navaneet Kadur Lakshminarasimha Murthy

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EDUCATION

PhD August 2019 - Present

University of Maryland, Baltimore County

Baltimore County, MD, USA

Advisor: Dr. Hamed Pirsiavash

Research: Self-supervised representation learning, knowledge distillation

M.Tech (Research) August 2016 – July 2019

Indian Institute of Science Bangalore, India

Advisor: Prof. Venkatesh Babu

Research: 3D Reconstruction from single 2D image, Person re-identification

B.Tech July 2012 - May 2016 Surathkal, India

National Institute of Technology, Karnataka Electrical and Electronics Engineering

Thesis: Convolutional neural networks for saliency detection in images

PUBLICATIONS

1. Tejankar, A.*, Koohpayegani, S.A.*, Navaneet K L*, Pourahmadi, K., Subramanya, A., Pirsiavash, H., "Constrained Mean Shift Using Distant Yet Related Neighbors for Representation Learning", under review, 2021

- 2. Navaneet K L, Koohpayegani, S.A., Tejankar, A., Pirsiavash, H., "Regression as a Simple Yet Effective Tool for Self-supervised Knowledge Distillation", BMVC, 2021 [Paper] [Code]
- 3. Navaneet K L, Mathew, A., Kashyap, S., Hung, W., Jampani, V., Babu, R.V., "From Image Collections to Point Clouds with Self-supervised Shape and Pose Networks", CVPR, 2020 [Paper][Code]
- 4. Navaneet K L, Mandikal, P., Jampani, V. and Babu, R.V., "DIFFER: Moving Beyond 3D Reconstruction with Differentiable Feature Rendering", CVPR Workshops, 2019 [Paper][Code]
- 5. Navaneet K L*, Mandikal, P.*, Agarwal, M and Babu, R.V., "CAPNet: Continuous Approximation Projection for 3D Point Cloud Reconstruction Using 2D Supervision", AAAI, 2019 [Paper][Code]
- 6. Navaneet K L, Todi V., Babu, R.V. and Chakraborty, A., "All for One: Frame-wise Rank Loss for Improving Video-based Person Re-identification", ICASSP, 2019 [Paper]
- 7. Mandikal, P.*, Navaneet K L*, Agarwal, M.* and Babu, R.V., "3D-LMNet: Latent Embedding Matching for Accurate and Diverse 3D Point Cloud Reconstruction from a Single Image", BMVC, 2018 [Paper][Code]
- 8. Navaneet K L, Sarvadevabhatla, R.K., Shekhar, S., Babu, R.V. and Chakraborty, A., "Operator-In-The-Loop Deep Sequential Multi-camera Feature Fusion for Person Re-identification". IEEE Transactions on Information Forensics and Security, 2018 [Paper]
- 9. Mandikal P*, Navaneet K L*, and Babu, R.V., "Part Segmented 3D Point Cloud Reconstruction from a Single Image", 3DRMS, ECCV Workshop, 2018 [Paper][Code]
- 10. Navaneet K L, Madhusudana P.C, Suresha P, Periyasamy V, Ghosh P.K., "Multiple Spectral Peak Tracking for Heart Rate Monitoring from Photoplethysmography Signal during Intensive Physical Exercise", IEEE Signal Processing Letters, Dec. 2015 [Paper]

^{*} Indicates equal contribution

SKILLS

Languages: Python, C

Frameworks/Tools: PyTorch, TensorFlow, OpenCV, MATLAB, GitHub

SCHOLASTIC ACHIEVEMENTS

- Awarded 'NetApp Medal for best M.Tech (Research) thesis 2020' for my masters thesis at IISc on deep learning based approaches for single image 3D object reconstruction and person re-identification
- Awarded 'M.Tech Project Award 2017-18' by Robert Bosch Centre for Cyber Physical Systems
- Part of CVPR 2020 'Outstanding Reviewers'. Reviewer for conferences and journals including CVPR, ICCV, AAAI, WACV, ACCV, ICPR, IEEE Signal Processing Letters and IET Computer Vision
- Accepted for AAAI-2019 Student Volunteer Program. Awarded AAAI-2019 Scholarship and Microsoft Research Travel Grant to assist conference travel
- Part of the team placed 4th world wide in the Signal Processing Cup 2015, conducted by IEEE Signal Processing Society
- Won 1st place in Automata-2013 and Automata-2014 and headed the organizing committee of Automata-2015, an image processing based inter-institutional competition in the annual technical fest of NITK

EXTRA CURRICULAR ACTIVITIES

- Tutored 1st year B.Tech students in Electrical Engineering, in a program to help minority students
- Participated in 1st International Convention of SPIC MACAY held at IIM, Calcutta in May 2013
- Won the Best Pitch award in an entrepreneurship event conducted by Entrepreneurs Club, NITK
- · Secured 28th position in State level chess competition held in Bangalore in 2007