TARUN KALLURI

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E-Mail | Webpage | Google Scholar | LinkedIn | GitHub

RESEARCH INTERESTS

- Label Efficient Learning: Self/semi/weakly-supervised learning and learning with noisy labels.
- Domain Adaptation: Unsupervised domain adaptation, Transfer Learning.
- Trustworthy ML: Fairness and interpretability in AI.

EDUCATION

Ph.D. Student in Computer Science, UC San Diego

La Jolla, CA, USA Sep. 2019 - Present

- Overall GPA: 3.9/4.0
- Selected Courses: Probabilistic Graphical Models, Computer Vision, Trustworthy Machine Learning, Online Learning, Probabilistic Unsupervised Learning, Convex Optimization.

B.Tech. in Indian Institute of Technology, Guwahati

Guwahati, India July.2012 - May.2016

- Major in Electronics and Communication (ECE), Minor in CSE.
- Overall GPA: 9.03/10
- Selected Courses: Probability and Random Processes, Pattern Recognition and Machine Learning, Game Theory and Economics, Queuing Systems, Information Theory.

PUBLICATIONS

- 1. FLAVR: Flow-Agnostic Video Representations for Fast Frame Interpolation. Tarun Kalluri, Deepak Pathak, Manmohan Chandraker, Du Tran. CVPR, 2021.
- 2. Instance Level Affinity Based Transfer for Unsupervised Domain Adaptation Astuti Sharma, Tarun Kalluri, Manmohan Chandraker. CVPR, 2021.
- 3. Universal Semi-supervised Semantic Segmentation. Tarun Kalluri, Girish Varma, Manmohan Chandraker, Jawahar, C.V. ICCV, 2019.
- 4. Semantic Segmentation Datasets for Resource Constrained Training. Tarun Kalluri, Ashutosh Misra*, Sudhir Kumar, Girish Varma, Anbumani Subramanian, Manmohan Chandraker, Jawahar, C.V. In NCVPRIPG 2019. [Oral]
- 5. Machine Learning for Accurate Force Calculations in Molecular Dynamics Simulations. Punyaslok Pattnaik, Shampa Raghunathan, Tarun Kalluri, Prabhakar Bhimalapuram, Jawahar, C. V., Deva Priyakumar. The Journal of Physical Chemistry A, 2020.

RESEARCH & INDUSTRY EXPERIENCE

 $\bullet\,$ Facebook AI Research, Menlo Park, CA, USA

Jun. 2020 - Sep. 2020

Video Frame Interpolation

Research Intern - Du Tran, Deepak Pathak

- Fast and efficient video frame interpolation technique, without requiring any flow or depth information.
- Applied Research Labs, IIIT Hyderabad, India Semi-supervised Semantic Segmentation

Sep. 2017 - Aug. 2019

Research Student - Prof. CV Jawahar

- Semi-supervised learning for semantic segmentation on diverse datasets, like road scenes from India and Europe using a novel feature alignment module.
- Oracle India Pvt. Ltd., Bengaluru, India

July. 2016 - Aug. 2017

Applied Data Scientist - SaaS Provisioning

- Server technology team, with special focus on fusion application provisioning.
- Developed *Spyder*, an automation tool for diagnosis of large scale cloud instance provisioning, upgrade and patching.

TALKS & PRESENTATIONS

- Domain adaptation for urban scene understanding, Augmented Reality and Self-Driving workshop, Qualcomm San Diego, June 2020.
- Domain adaptation for urban scene understanding, SIAM Conference on Computational Science and Engineering, March 2021.

ACADEMIC SERVICE

• Conference reviewer for IROS'20.

HONORS & AWARDS

• Recipient of IPE PhD fellowship (link) 2020-21 for contribution towards practical ethics in AI.

2021

• Ranked 116 (top 0.1%) in EAMCET entrance exam and 2055 (top 0.4%) in JEE entrance exam. May 2012

• Winner of SMS Classification Challenge, Video Action Recognition challenge at Samsung R&D Hackathon. Nov. 2017

SKILLS

- Programming Language: MATLAB, C++, Python, Verilog, VHDL.
- Software and Platforms: TensorFlow, PyTorch, OpenCV.