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: Adversarial domain adaptation, Transfer Learning.
- Robustness in ML: Trustworthy ML, Interpretable representation learning.

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. (arxiv), 2020 [pdf]
- 2. Instance Level Affinity Based Transfer for Unsupervised Domain Adaptation Astuti Sharma*, Tarun Kalluri*, Manmohan Chandraker. Anonymous Submission, 2020
- 3. Universal Semi-supervised Semantic Segmentation. Tarun Kalluri, Girish Varma, Manmohan Chandraker, Jawahar, C.V.. ICCV, 2019. [pdf]
- 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. [pdf]

RESEARCH & INDUSTRY EXPERIENCE

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 Universal Representation Learning

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.

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.