

# TARUN KALLURI

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

## RESEARCH INTERESTS

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

## EDUCATION

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- 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

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1. **FLAVR: Flow-Agnostic Video Representations for Fast Frame Interpolation.** Tarun Kalluri, Deepak Pathak, Manmohan Chandraker, Du Tran. (arxiv), 2020
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.**
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

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- **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** *Sep. 2017 - Aug. 2019*  
**Semi-supervised Semantic Segmentation**  
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**

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- **Domain adaptation for urban scene understanding**, *Augmented Reality and Self-Driving workshop*, Qualcomm San Diego, June 2020.

### **ACADEMIC SERVICE**

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- Conference reviewer for IROS'20.

### **HONORS & AWARDS**

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- 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**

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