Chaitanya Devaguptapu

https://chaitanya.one Github: tdchaitanya

Education

Indian Institute of Technology, Hyderabad

Aug 2019 - Jul 2022

Email: email@chaitanya.one

Masters by Research (M.Tech-RA) in Computer Science

9.7/10

Advisor: Dr. Vineeth N Balasubramanian

Awards: Shastri Research Fellowship, Appreciation in Research by Department of CSE

Keshav Memorial Institute of Technology, Hyderabad

Aug 2014 - May 2018

B. Tech in Electronics and Communication

Research Experience

Fujitsu Research India

July 2022 - Present

Applied Researcher-II

Working on problems realated to Non-Euclidean Learning

PAIR lab, University of Toronto

Jan 2021 - Present

Visiting Graduate Researcher

Advisor: Dr.Animesh Garg

Working on problems related to data-efficient transfer learning and fine-grained video

understanding

Indian Institute of Technology (IIT), Hyderabad

June 2018 - Present

Research Assistant

Advisor: Dr. Vineeth N Balasubramanian

Conducted Research on borrowing features from data-rich domains to improve object detection in domains with less annotated data. Parallelly, I worked on object detection in low-resolution Thermal Images. The research was supported by DRDO, Government of India.

Research

- [1] Chaitanya Devaguptapu, Sumukh Aithal, Yamada Moyuru, Manohar Kaul, Regularizing Self-Supervised Learning on Small Datasets via Semantic Graph Consistency (under review)
- [2] Chaitanya Devaguptapu, Samarth Sinha, Joseph K J, V. Balasubramanian, Animesh Garg, Δ-Networks for Efficient Model Patching (under review)
- [3] Chaitanya Devaguptapu*, Siddharth Katageri*, Arkadipta De*, Prasad Kasu, Charu Sharma, Manohar Kaul: Synergizing Contrastive Learning and Optimal Transport for 3D Point Cloud Domain Adaptation, In Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision (WACV 2024)
- [4] Shivangana Rawat, **Chaitanya Devaguptapu**, V. Balasubramanian, Partial Label Learning meets Active Learning: Enhancing Annotation Efficiency through Binary Questioning, International Conference on Machine Learning (ICML) Workshops, 2023.

- [5] Chaitanya Devaguptapu, Devansh Agarwal, Gaurav Mittal, Pulkit Gopalani, V. Balasubramanian; Balasubramanian, On Adversarial Robustness: A Neural Architecture Search Perspective, Workshop on Adversarial Robustness in the Real World, ICCV-21, also accepted at ICLR-21 workshops (as a Contributed Talk and Spotlight)
- [6] Chaitanya Devaguptapu* Akshay Chandra L*, Sai Vikas Desai*, , V. Balasubramanian. "On Initial Pools for Deep Active Learning", Preregistration Workshop at NeurIPS 2020 (PMLR Volume 148)
- [7] Chaitanya Devaguptapu, Ninad Akolekar, Manuj Sharma, V. Balasubramanian., A Methodology for Transfer of Knowledge from Data-Rich Domains for Thermal Image Processing, Indian Patent Application No. 202011032663 (filed in Aug 2020)
- [8] Chaitanya Devaguptapu, Ninad Akolekar, Manuj Sharma, V. Balasubramanian. "Borrow from Anywhere: Pseudo Multi-modal Object Detection in Thermal Imagery," Workshop on Perception Beyond the Visible Spectrum, CVPR 2019 (Spotlight)

Industry/Other Experience

Upgrad

Small Group Coach

Jun 2020 - Jan 2023

As a Small Group Coach, I hold a 1.5 hour session every 15 days to clear the doubts of students pursuing upGrad's PG Diploma in Machine Learning, Data Science

Udacity

Student Mentor

Jan 2017 - Dec 2020

I guide nanodegree students and review, debug, asses code files of projects submitted as a part of Deep Learning and AI Nanodegree's

SmatSocial Hyderabad, India

Machine Learning Intern

Dec 2016 - Feb 2017

Worked on building a system for automated emotion recognition from speech. The project was more applied in nature, we made use of several open-source NLP and Speech Processing libraries.

InfiBooksHyderabad, IndiaData Analyst InternOct 2016 - Dec 2017

Built an end-to-end data cleaning pipeline; Analysed purchase patterns of users and suggested methods to increase the sales; Automated the process of data collection.

Service and Achievements

Awards: Shastri Research Student Fellowship - 2020 (one among the 8 students selected from India), Appreciation in Research Award by Department of CSE, IIT-Hyderabad

Reviewer: NeurIPS-2022, ICLR-2022, ECCV-2022, IEEE Pattern Recognition Journal, MFI-2020, WACV-2022, NeurIPS-2023, WACV-2024, AAAI-2024

Sub-Reviewer: NeurIPS-23, WACV-23, CVPR-2019, ECML-PKDD-2019, ICCV-2019, AAAI-2020, ICLR-2020, BMVC-2020, NeurIPS-2020

Started an ACM student chapter at IIT-Hyderabad with my peers; Serving as a Vice chair for this chapter (Oct 2020 - June 2021) . Organized various research talks and events to promote student-driven research culture at IIT-Hyderabad

Served as a System-Admin for NVIDIA DGX system at IIT-Hyderabad

Relevant Coursework, Certifications

IIT-H: CS5370 Deep Learning for Vision, CS6440 Special Topics in Machine Learning, CS5500 Reinforcement Learning

Online: *Udacity Nanodegree's:* Deep Learning (March, 2018); Machine Learning (August 2016); *Coursera:* Machine Learning Specialisation by University of Washington.