# Chaitanya Devaguptapu

https://chaitanya.one Github: tdchaitanya

#### **Education**

## Indian Institute of Technology, Hyderabad

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

• Advisor: Dr. Vineeth N Balasubramanian

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

## Jawaharlal Nehru Technological University, Hyderabad

Aug 2014 - May 2018

Aug 2019 - Jul 2022

GPA: 9.7/10

Email: email@chaitanya.one

B. Tech in Electronics and Communication

## Research Experience

## Fujitsu Research India

July 2022 - Present

Applied Researcher - II

Most recent works focus on Domain Adaptation on Point Cloud data (WACV-2024) and inducing structure in self-supervised vision transformers

Primarily focus is on problems and applications related to Non-Euclidean Learning. (thrust area of Fujitsu Research India)

#### PAIR lab, University of Toronto

Jan 2021 - July 2022

Visiting Graduate Researcher

<u>Advisor:</u> Dr.Animesh Garg

Worked on problems related to data-efficient transfer learning and finegrained video understanding

#### Indian Institute of Technology (IIT), Hyderabad

June 2018 - July 2022

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.

#### **Papers and Patents**

- [1] 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) (Oral Top 7% of accepted papers)
- [2] 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.
- [3] 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)

- [4] 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)
- [5] 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)
- [6] 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)

#### **Pre-prints**

- [1] Chaitanya Devaguptapu, Samarth Sinha, Joseph K J, V. Balasubramanian, Animesh Garg,  $\Delta$ -Networks for Efficient Model Patching
- [2] Chaitanya Devaguptapu, Sumukh Aithal, Yamada Moyuru, Manohar Kaul, Semantic Graph Consistency: Going Beyond Patches for Regularizing Self-Supervised Vision Transformers

## Industry/Other Experience

**UpGrad** June-2020 - Jan 2023

Small Group Coach Remote

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 Jan 2017 - Dec 2020 Student Mentor Remote

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

**SmatSocial** Dec 2016 - Feb 2017 Hyderabad, India

Machine Learning Intern

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.

**InfiBooks** Oct 2016 - Dec 2017 Data Analyst Intern Hyderabad, India

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-2023, WACV-2023, 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.