

Chaitanya Devaguptapu

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Education

Indian Institute of Technology, Hyderabad

M.Tech in Computer Science

Aug 2019 - Present

9.0/10

Advisor: Dr. Vineeth N Balasubramanian

Awards: Shastri Research Fellowship, Appreciation in Research

Keshav Memorial Institute of Technology, Hyderabad

B.Tech in Electronics and Communication

Aug 2014 - May 2018

Research Experience

PAIR lab, University of Toronto

Visiting Graduate Researcher

Jan 2021 - Present

Advisor: Dr. Animesh Garg

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

Indian Institute of Technology (IIT), Hyderabad

Research Assistant

June 2018 - Present

Advisor: Dr. Vineeth N Balasubramanian

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

Research

- [1] **Chaitanya Devaguptapu**, Samarth Sinha, V. Balasubramanian, Animesh Garg, On the Use of Skip Connections for Transfer Learning (under review)
- [2] **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](#))
- [3] Akshay Chandra L^{*}, Sai Vikas Desai^{*}, **Chaitanya Devaguptapu**^{*}, V. Balasubramanian. "On Initial Pools for Deep Active Learning", Preregistration Workshop at **NeurIPS 2020** (PMLR Volume 148)
- [4] **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)
- [5] **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

Remote

Jun 2020 - Present

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

Remote

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

Machine Learning Intern

Hyderabad, India

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.

Infibooks

Data Analyst Intern

Hyderabad, India

Oct 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.

Industry relevant Projects

- **Object Detection in Low-Resolution Thermal Imagery** - Enhanced the performance of object detection in thermal images by increasing the resolution of 160 x 120 images using super resolution and various deep learning based image interpolation techniques. This was a joint project with DRDO, Government of India

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: ICLR-2022, ECCV-2022, IEEE Pattern Recognition Journal, MFI-2020

Sub-Reviewer: CVPR-2019, ECML-PKDD-2019, ICCV-2019, AAI-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

Serving 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.