Chaitanya Devaguptapu

Email: email@chaitanya.one

https://chaitanya.one
Github: tdchaitanya

Education

Indian Institute of Technology, Hyderabad Aug 2019 - Present
M.Tech in Computer Science *9.0/10*

   Advisor: Vineeth N Balasubramanian

Keshav Memorial Institute of Technology, Hyderabad Aug 2014 - May 2018
B.Tech in Electronics and Communication

Research Experience

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. Parallely, I worked on object detection 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, Adaptive Skip Connections for Data Efficient 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. "Is There a Good Initial Pool for 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   Remote
Small Group Coach   *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   Remote
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.

InfiBooks   Hyderabad, India
Data Analyst Intern   *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)

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

Reviewer: MFI-2020

Started an ACM student chapter at IIT-Hyderabad with my peers; Serving as a Vice chair for this chapter (Oct 2020 - June 2021) . Organised 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.