Mallikarjuna Tupakula

❷ Website ❷ E-mail ♀ Github ♥ Twitter in LinkedIn

Education

RVR & JC College of Engineering, Guntur, India

2014 - 2020

Bachelor of Technology in Computer Science and Engineering, CGPA (7.20/10)

Experience

Indian School of Business, Hyderabad, India [🕹]

Dec 2020 - Present

Research Assistant | Advisor : Prof. Sumeet Kumar

<u>Projects</u>: Block Ryan's Toys Reviews? The Perils of Implicit Advertisements on YouTube for Kids, Finding Product Placement in YouTube Videos, A Multi-Modal Approach to Study Gender Stereotypes in Kids' Videos, Quantifying the Educational Quality of Kids' Videos using Machine Comprehension, How brand promotions have evolved in kids videos?

⇒ Helping and Guiding summer interns on their projects

Spacept, Stockholm, Sweden []

Aug 2020 - Nov 2020

Machine Learning Intern | Advisor Mr. Sergiu Iliev (Founder)

<u>Project</u>: Built a Machine Learning model for Oil Spill happened at **Mauritius Island** using Satellite images collected from Google Earth Engine

- ⇒ Got an experience in collecting satellite images from multiple sources
- ⇒ Demonstrated some concepts to new interns and how machine learning model classifying oil-spill vs Normal

Indian Institute of Technology Madras, Chennai, India []

Dec 2019 - Mar 2020

Research Intern | Advisor : Prof. Srinivasa Chakravarthy

- ⇒ Worked at the Neuromotive team on writing research paper abstracts and learnt the new concepts in medical imaging also did initial exploration on CT scan images.
- ⇒ Updated the *bharatiscript* web page with new content

Indian Institute of Management Bangalore, Bangalore, India [3

May 2019 - July 2019

Research Intern | Advisors: Prof. Trilochan Sastry, Mr. Shubh Patodi, Mr. Shivam Shukla

- Worked at <u>Farmveda</u> analyzing sales data, and also at Digital Marketing team by promoting products on social media
- ⇒ Did a survey based research on villages how CCD (<u>Center for Collective Development</u>) helps farmers to get products to Market without intermediate persons by gaining more profits

Publications S = In Submission

[S.1] A Multi-Modal Approach to Study Gender Stereotypes in Kids' Videos

Sumeet Kumar, Tiasa Singha Roy, Mallikarjuna Tupakula, Ashique KhudaBukhsh

Research Projects

Block Ryan's Toys Reviews? The Perils of Implicit Advertisements on YouTube for Kids

Advisor: Prof. Sumeet Kumar

Scraped the Amazon product ranking data from the Amazon using selenium and also scraped the 100 channels related to Kids videos data from the YouTube then later analyzed how product rankings are changing especially after YouTube has made a policy that advertisements in the YouTube Kids are not promoted.

Finding Product Placement in YouTube Videos

Advisor: Prof. Sumeet Kumar

⇒ Processed Ryan's world videos which contains 1934 videos with AWS transcripts to scrape products with name matching techniques using product titles of Amazon to get the video frames for corresponding product titles then built a machine learning model with amazon product pictures and done inference on scraped youtube video frames.

A Multi-Modal Approach to Study Gender Stereotypes in Kids' Videos

Advisor: Prof. Sumeet Kumar, Prof. Ashique KhudaBukhsh

⇒ Processed 5000 YouTube videos related to kids from the 28 channels which have occupation terms present in the AWS transcripts and getting their picture frames detecting male and female faces using RetinaFace model and later gender classifying their faces using the MTCNN model and calculating how much bias in those videos. Using AWS transcripts calculating RIPA values for each occupation determines how much bias is present in the transcripts.

Quantifying the Educational Quality of Kids' Videos using Machine Comprehension

Advisor: Prof. Sumeet Kumar, Prof. Ashigue KhudaBukhsh

Collected the google generated transcripts for 130 top channel videos related to kids and taken TQA dataset questions doing inferencing by replacing topic content with transcript content. Also scraping video frames from these videos passing the frames to the image captioning model to get captions and doing inference with captions as well.

How brand promotions have evolved in kids videos?

Advisor: Prof. Sumeet Kumar, Prof. Ashique KhudaBukhsh

Analyzing 50,000 videos descriptions from the 130 top channels related to kids videos how the advertisements and promotions are evolving after changing the youtube policy on kids related videos.

Scholarships

<>	Secured scholarship from Facebook AI to pursue Computer Vision Nanodegree at Udacity	Dec 2019 - Mar 2020
>	Secured scholarship from Facebook AI to pursue Secure and Private AI course at Udacity	May 2019 - Aug 2019
□>	Secured full scholarship for my undergraduate studies from Government of Andhra Pradesh	June 2016 - Apr 2020

Skills

Programming Python, C/C++, MATLAB, Java, HTML

Frameworks PyTorch, Numpy, cv2, selenium, pandas, numpy, scikit-learn

Related Coursework Deep Learning, Computer Vision, Machine Learning, Probability and Statistics, Linear

Algebra and Differential Equations

Academic Service

- ⇒ Volunteered at our college in NSS group in various activities
- ⇒ Volunteered at Job Fair hosted by our college

Miscellaneous

⇒ Shortlisted to attend Research Week with Google Research India (4 - day programme)

Feb 2022 - Feb 2022