CSE541 COMPUTER VISION

Weekly Report 2

Name	Enrollment No.
Paridhi Jain	AU2120226
Jash Parikh	AU2140108
Saahil Doshi	AU2140106
Kathan Dave	AU2140110

Project 1: Object detection techniques (in the case of small objects) on the AU Drone dataset

Week 2: Literature Review

Accomplishments:

- Conducted an extensive literature review to identify relevant research papers and studies in the field of small object detection.
- Reviewed papers focusing on similar prediction tasks, data sources, and methodologies.
- Identified potential approaches and techniques to be explored in our project based on the literature review.

Challenges:

- Sorting through a large volume of literature to find papers directly relevant to our project objectives.
- Evaluating the applicability and reliability of different methodologies and techniques discussed in the literature.
- Ensuring that the literature review covers a diverse range of perspectives and approaches in the field.

Next Steps:

- Synthesize the findings from the literature review into actionable insights for our project.
- Discuss potential approaches and methodologies to be adopted based on the literature review.
- Begin data collection and review process for Week 3.

Links of the papers/ articles referred to:

https://diva-portal.org/smash/get/diva2:1587035/FULLTEXT01.pdf

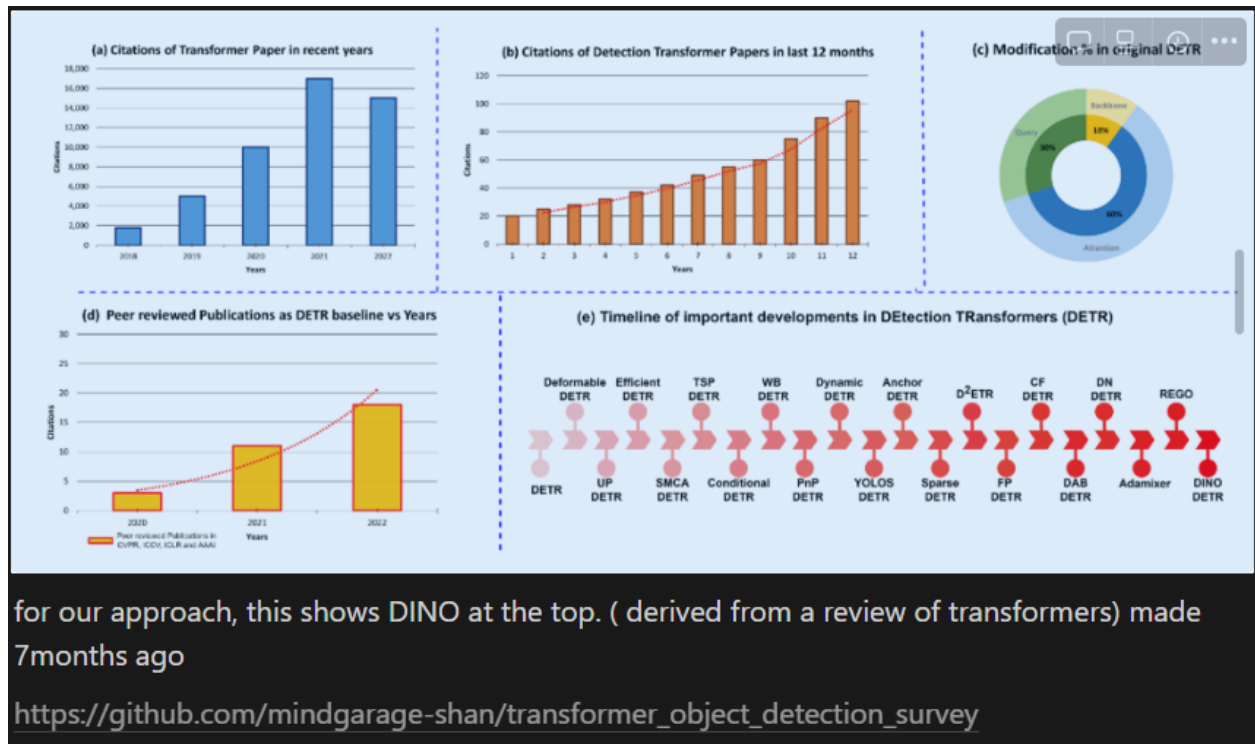https://www.hitechbpo.com/blog/top-object-detection-models.php

https://mediatum.ub.tum.de/doc/1625395/k08pxx4zjbl0lahyz01t9mpxt.A_Survey_of_the_Four_Pillars_for_Small_Object_Detection_Multiscale_Representation_Contextual_Information_Super-Resolution_and_Region_Proposal.pdf

https://arxiv.org/html/2304.00501v6

https://blog.dataiku.com/object-detection-with-deep-learning-on-aerial-imagery

for our approach, this shows DINO at the top. (derived from a review of transformers) made 7months ago

https://github.com/mindgarage-shan/transformer_object_detection_survey