



DSC 180 A01 - EXPLAINABLE AI DISCUSSION 3: COCO DATASET

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ANNOUNCEMENTS

- Instructor's office hour:
 - Tuesdays 3-4pm on Zoom (for link see Piazza staff directory)
 - Should we move to Friday 10am?
- Teams are put together by course instructor (not section instructors)
- Reminder:
 - Each week, submit your answers to the questions with your participation submission to Canvas

THIS WEEK'S ASSIGNMENT

Reading

- Browse the COCO dataset website and read the paper.

Programming

- Download the COCO API and get the Python API to work
- Run the demo: `cocoapi/PythonAPI/pycocoDemo.ipynb`

Participation Assignment

- Answer the following questions:
 1. What does the COCO dataset consist of?
 2. What does the Python API demo do?
 3. Which were the biggest problems your team had to solve to get the demo to work?

ANSWERS

1. What does the COCO dataset consist of?
 1. Training images, validation images, test images
 2. Annotations:
 1. Object Detection (Segmentation)
 2. Keypoint Detection
 3. Stuff Segmentation (things are countable objects such as people, animals, tools. Stuff classes are amorphous regions of similar texture or material such as grass, sky, road)
 4. Panoptic Segmentation (combines objects and stuff)
 5. Image Captioning
2. What does the Python API demo do?
3. Which were the biggest problems your team had to solve to get the demo to work?

OTHER DISCUSSION TOPICS

- COCO dataset parser
- COCO dataset on DSLMP server
 - We will add annotation datasets to the server
- Team forming status: teams have been formed, see Canvas under Groups
- ...

TASKS FOR WEEK 4

Reading (due Tuesday at noon)

- Watch the video and read the detailed explanation of the COCO dataset at <https://www.immersivelimit.com/tutorials/create-coco-annotations-from-scratch>

Programming for Checkpoint 1 (due next Friday)

- Modify the demo to create your own that is different than the default demo (due

Participation Assignment (due Tuesday at noon)

- What does your COCO demo do differently than the default demo?
- Show a sample output of your demo (can be a mock-up of what you want it to be)