Understanding the problem statement: COCO keypoints challenge

COCO keypoint challenge

- **Objective**: To determine person key points from images

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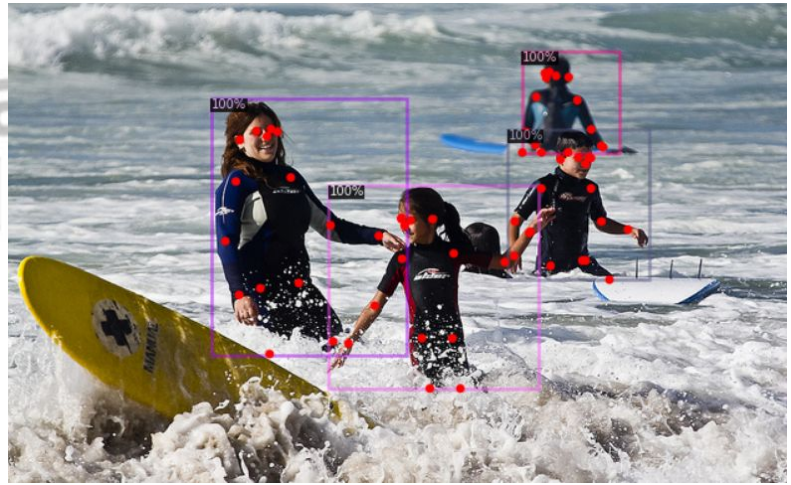
Pose

Detector



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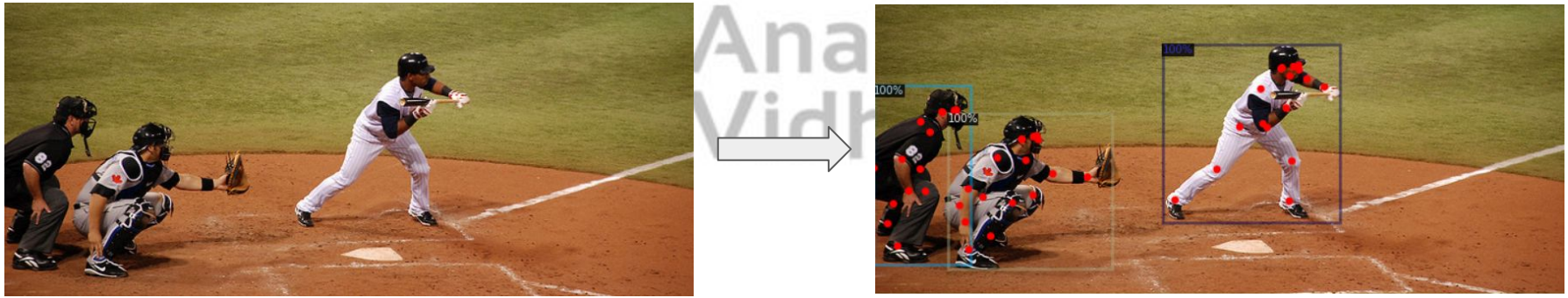

Understanding the Dataset: COCO keypoint challenge

- 58,945 images

Analytics Vidhya

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- 58,945 images
- 156,165 annotated people

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- 58,945 images
- 156,165 annotated people
- 1,710,498 total keypoints

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Understanding the Dataset: COCO keypoint challenge

- 58,945 images
- 156,165 annotated people
- 1,710,498 total keypoints
- 17 types of keypoints

```
"nose","left_eye","right_eye","left_ear","right_ear",
"left_shoulder","right_shoulder","left_elbow","right_elbow",
"left_wrist","right_wrist","left_hip","right_hip",
"left_knee","right_knee","left_ankle","right_ankle"
```


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Understanding the Dataset: COCO keypoint challenge

Keypoint: (x, y, v)

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- x, y represents the pixel locations

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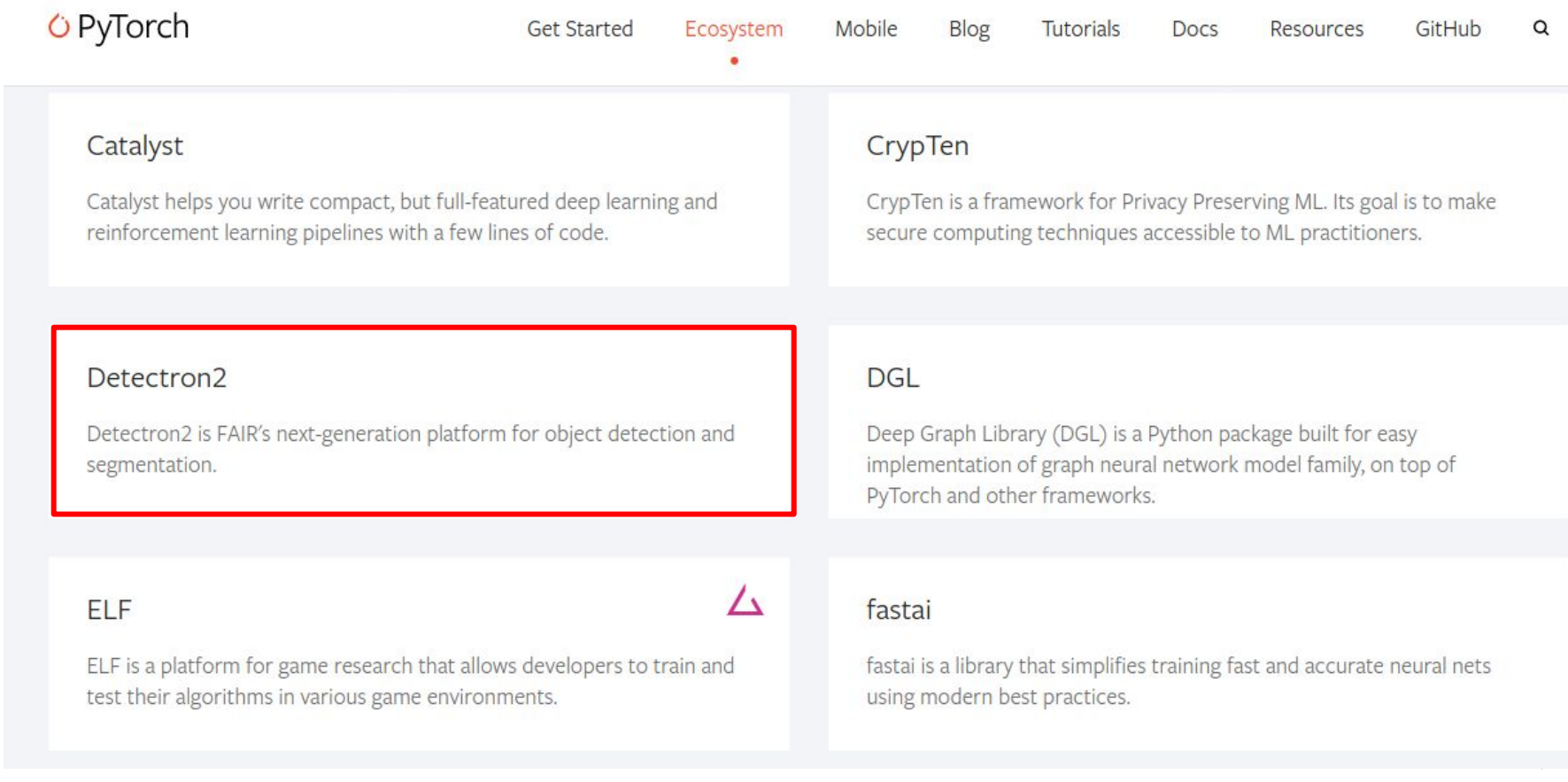
Understanding the Dataset: COCO keypoint challenge

Keypoint: (x, y, v)

- x, y represents the pixel locations
- v represents the visibility
  - v=0, not labeled (in which case x=y=0)
  - v=1, labeled but not visible
  - v=2, labeled and visible

Understanding the Dataset



Steps to solve the Pose Detection problem

1. Install Dependencies

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2. Load and pre-process the data

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2. Load and pre-process the data
3. Loading and training the model

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1. Install Dependencies
2. Load and pre-process the data
3. Loading and training the model
4. Evaluating model performance

Thank You

Analytics
Vidhya