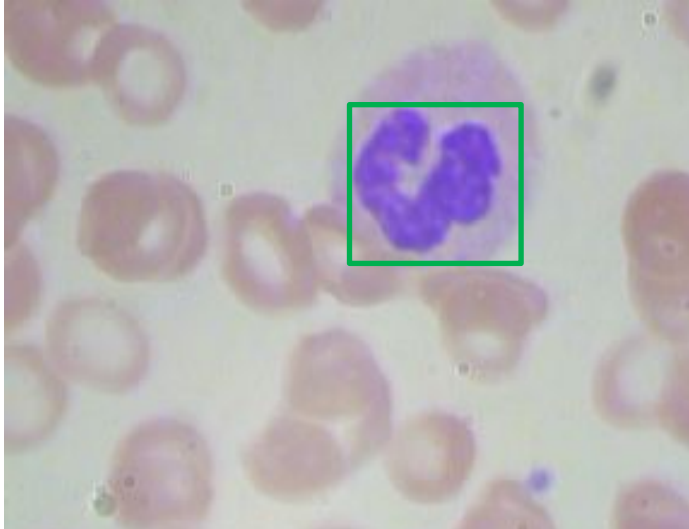


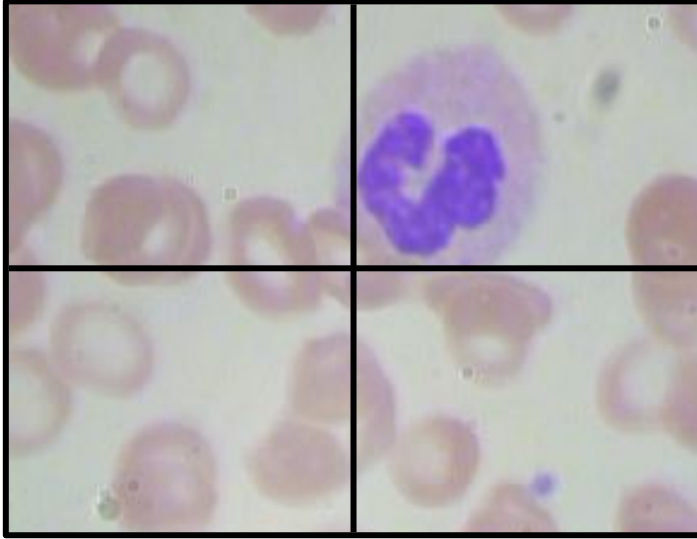
# Naive Approach for Object Detection

# Naive Approach for Object Detection



Analytics  
Vidhya

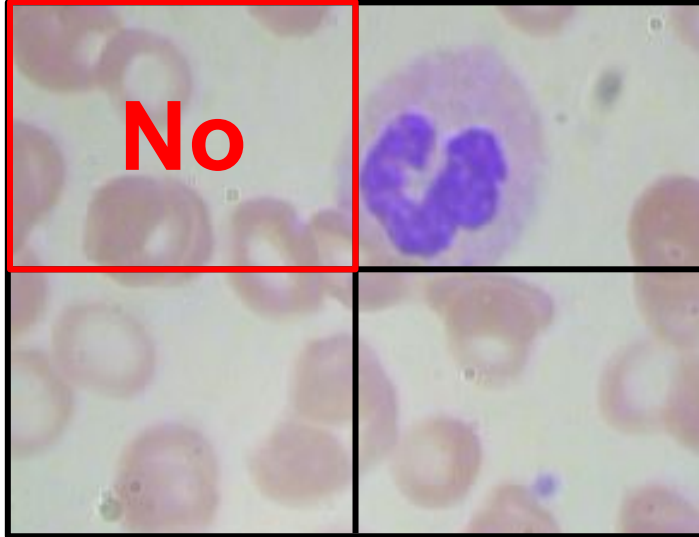
# Naive Approach for Object Detection



- **Step 1:** Divide image into patches

Analytics  
Vidhya

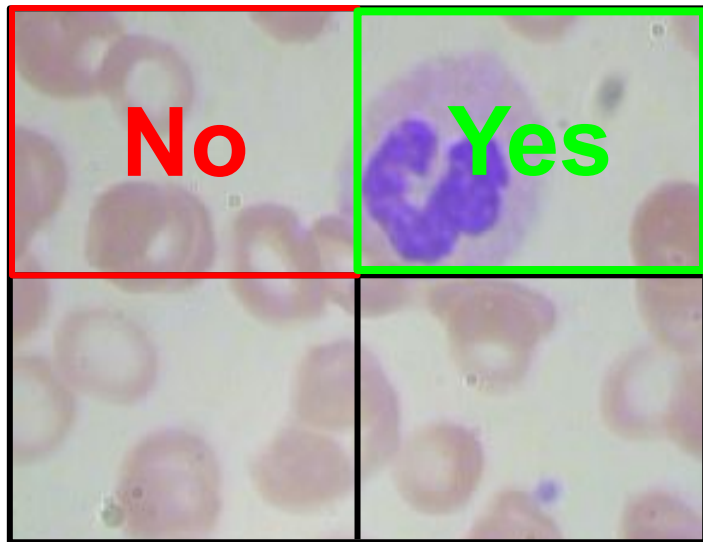
# Naive Approach for Object Detection



- **Step 1:** Divide image into patches
- **Step 2:** Classify each patch

Analytics  
Vidhya

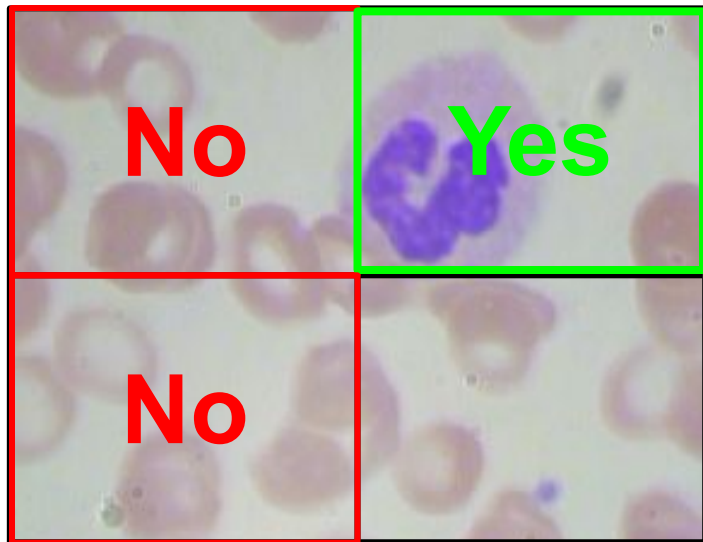
# Naive Approach for Object Detection



- **Step 1:** Divide image into patches
- **Step 2:** Classify each patch

Analytics  
Vidhya

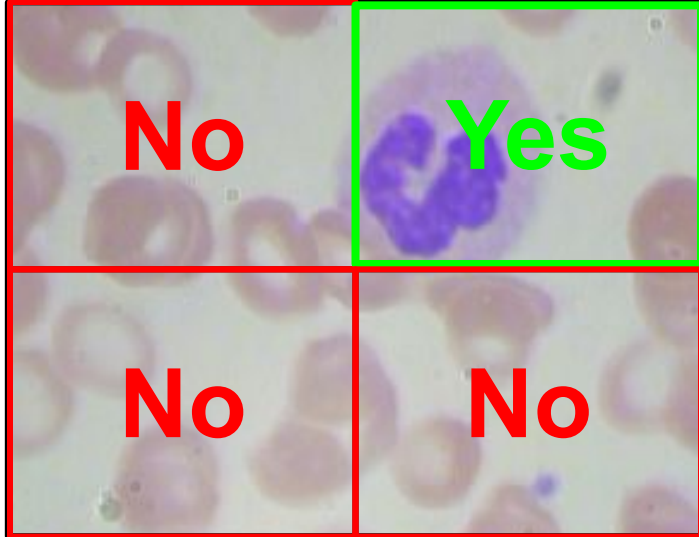
# Naive Approach for Object Detection



- **Step 1:** Divide image into patches
- **Step 2:** Classify each patch

Analytics  
Vidhya

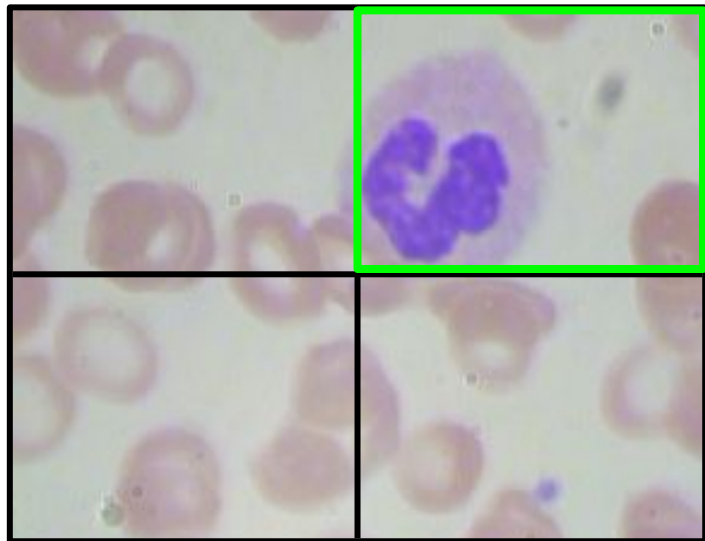
# Naive Approach for Object Detection



- **Step 1:** Divide image into patches
- **Step 2:** Classify each patch

Analytics  
Vidhya

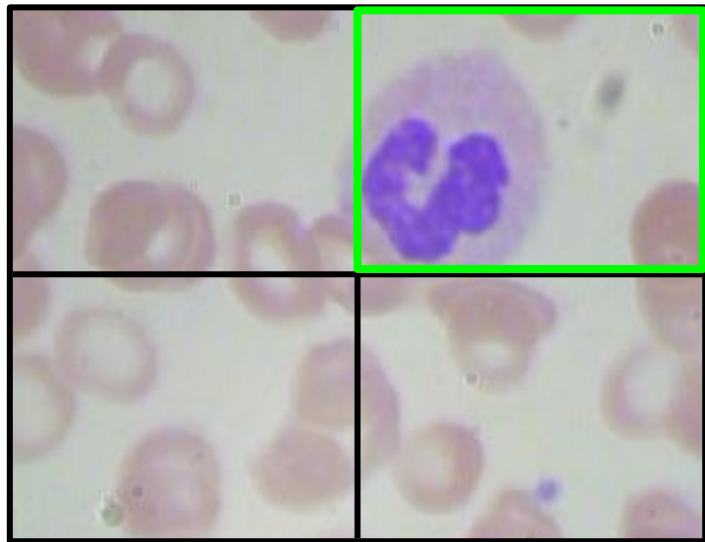
# Naive Approach for Object Detection



- **Step 1:** Divide image into patches
- **Step 2:** Classify each patch
- **Step 3:** Return Patch coordinates as bounding box



# Naive Approach for Object Detection



- **Step 1:** Divide image into patches
- **Step 2:** Classify each patch
- **Step 3:** Return Patch coordinates as bounding box

Restructure the Train Data  
for Naive Approach

# Prepare Train Data for Naive Approach

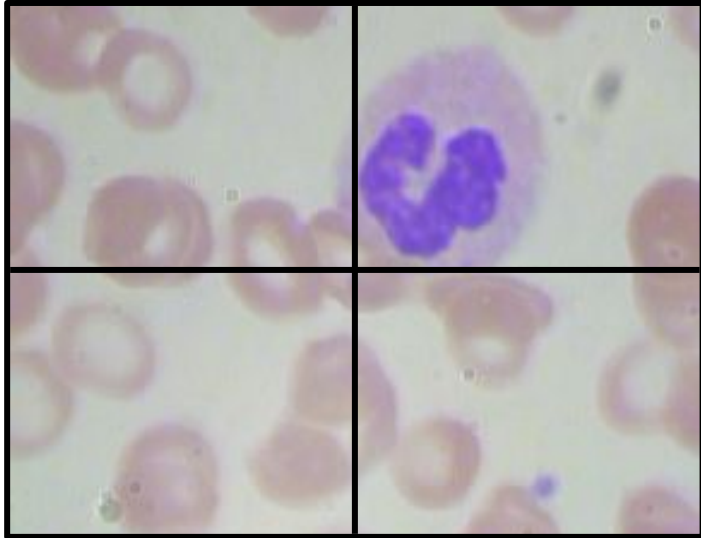


# Prepare Train Data for Naive Approach



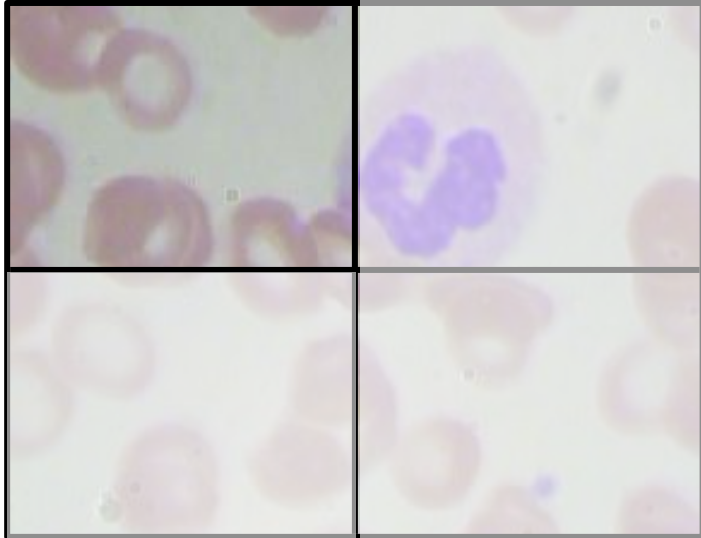
filename	xmin	xmax	ymin	ymax
1.jpg	310	530	50	240

# Prepare Train Data for Naive Approach



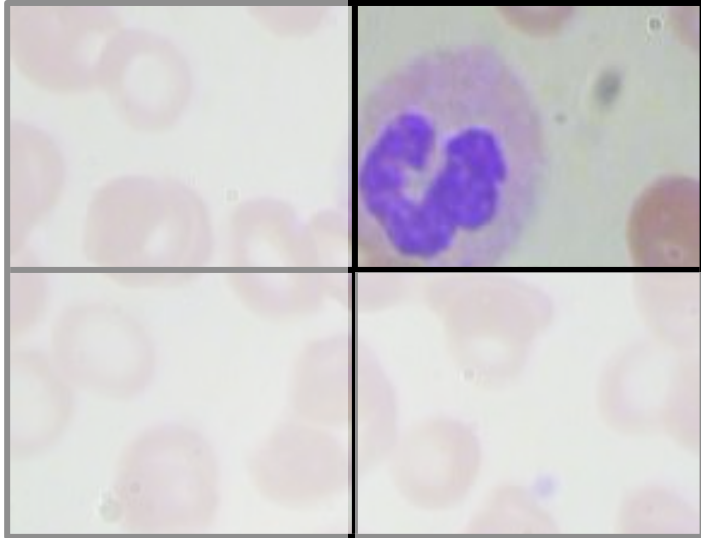
filename	patch	xmin	xmax	ymin	ymax	WBC (1/0)
1.jpg	1	0	320	0	240	0
1.jpg	2	320	640	0	240	1
1.jpg	3	0	320	240	480	0
1.jpg	4	320	640	240	480	0

# Prepare Train Data for Naive Approach



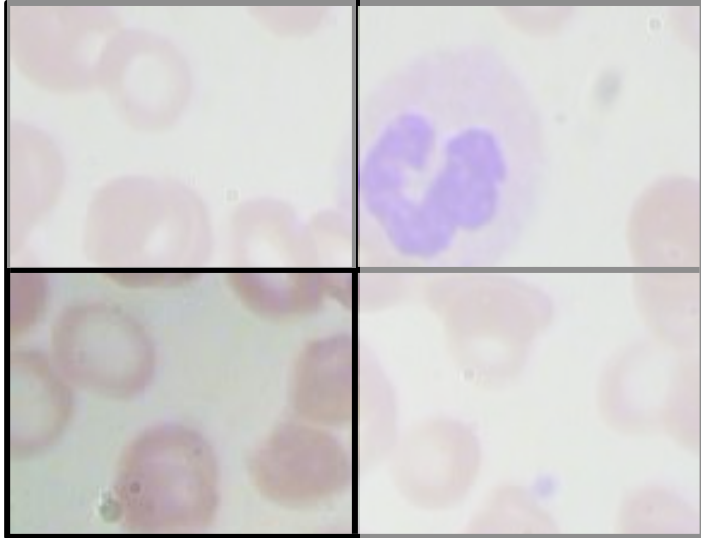
filename	patch	xmin	xmax	ymin	ymax	WBC (1/0)
1.jpg	1	0	320	0	240	0
1.jpg	2	320	640	0	240	1
1.jpg	3	0	320	240	480	0
1.jpg	4	320	640	240	480	0

# Prepare Train Data for Naive Approach



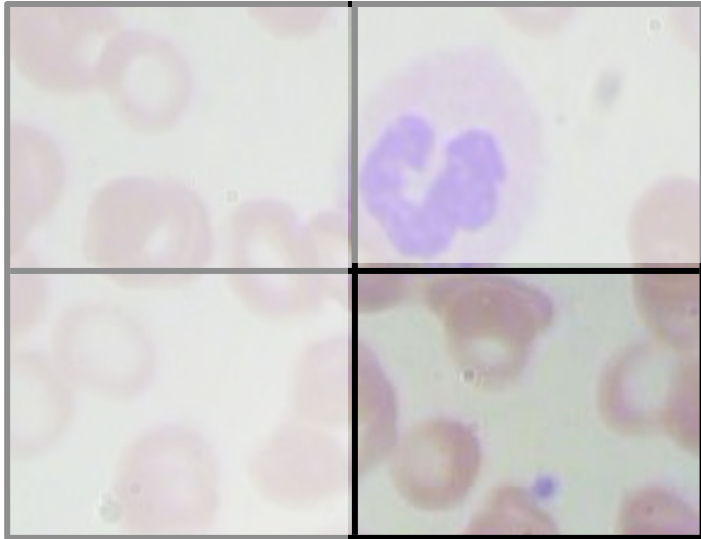
filename	patch	xmin	xmax	ymin	ymax	WBC (1/0)
1.jpg	1	0	320	0	240	0
1.jpg	2	320	640	0	240	1
1.jpg	3	0	320	240	480	0
1.jpg	4	320	640	240	480	0

# Prepare Train Data for Naive Approach



filename	patch	xmin	xmax	ymin	ymax	WBC (1/0)
1.jpg	1	0	320	0	240	0
1.jpg	2	320	640	0	240	1
1.jpg	3	0	320	240	480	0
1.jpg	4	320	640	240	480	0

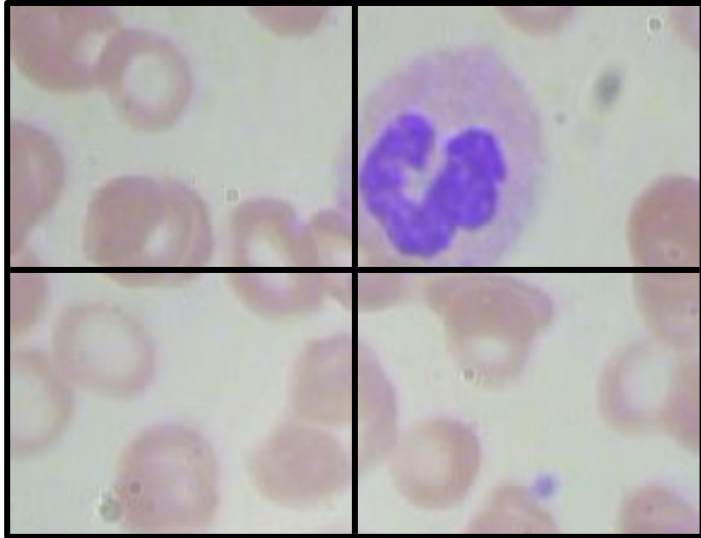
# Prepare Train Data for Naive Approach



filename	patch	xmin	xmax	ymin	ymax	WBC (1/0)
1.jpg	1	0	320	0	240	0
1.jpg	2	320	640	0	240	1
1.jpg	3	0	320	240	480	0
1.jpg	4	320	640	240	480	0



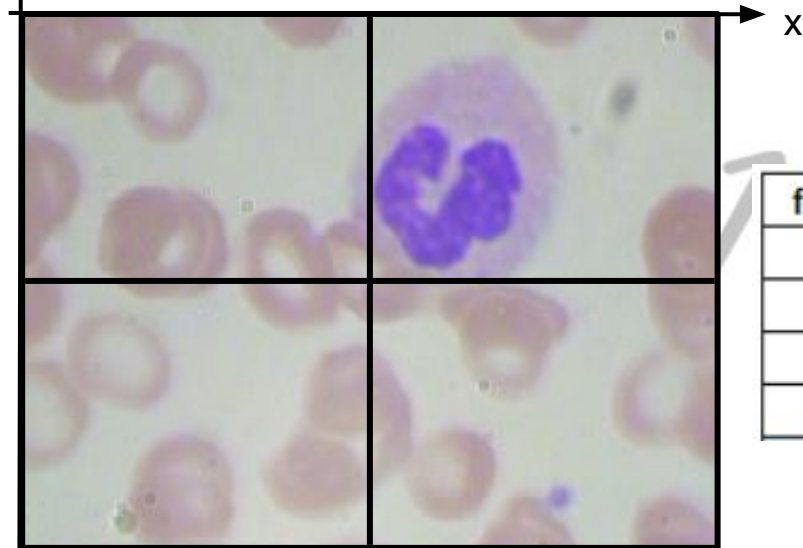
# Prepare Train Data for Naive Approach



filename	patch	xmin	xmax	ymin	ymax	WBC (1/0)
1.jpg	1	0	320	0	240	0
1.jpg	2	320	640	0	240	1
1.jpg	3	0	320	240	480	0
1.jpg	4	320	640	240	480	0

# Prepare Train Data for Naive Approach

(0,0)

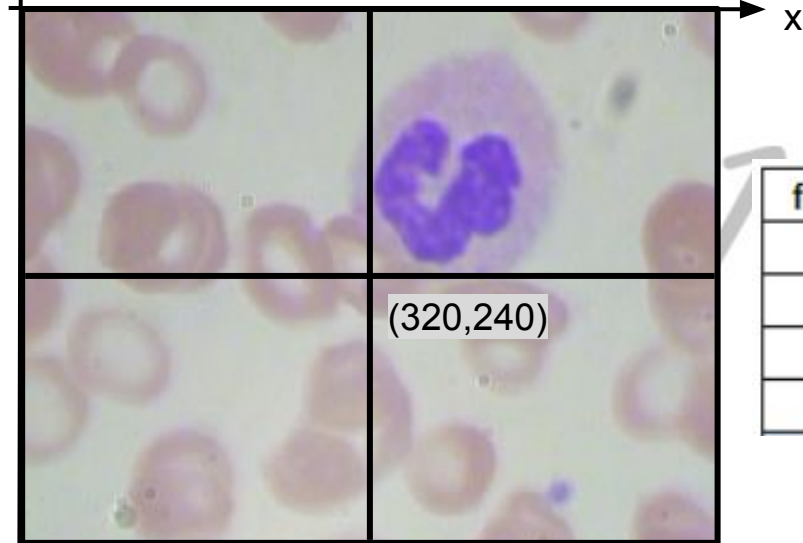


(640,480)

filename	patch	xmin	xmax	ymin	ymax	WBC (1/0)
1.jpg	1	0	320	0	240	0
1.jpg	2	320	640	0	240	1
1.jpg	3	0	320	240	480	0
1.jpg	4	320	640	240	480	0

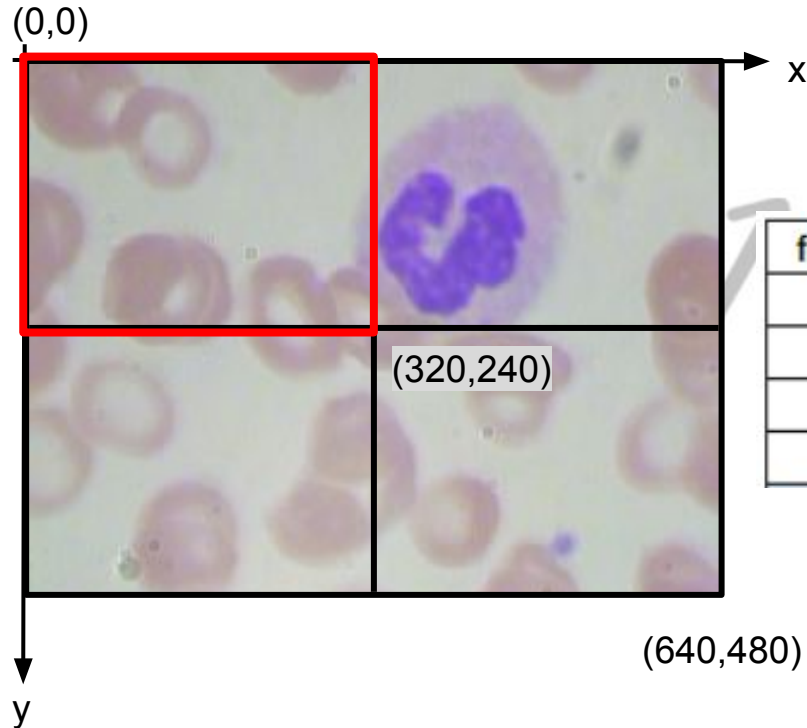
# Prepare Train Data for Naive Approach

(0,0)



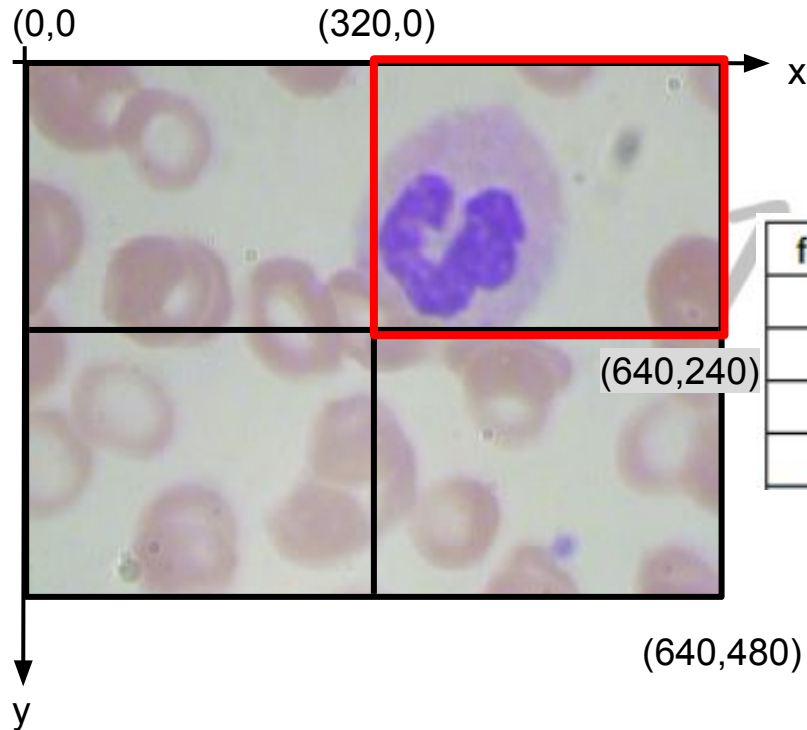
filename	patch	xmin	xmax	ymin	ymax	WBC (1/0)
1.jpg	1	0	320	0	240	0
1.jpg	2	320	640	0	240	1
1.jpg	3	0	320	240	480	0
1.jpg	4	320	640	240	480	0

# Prepare Train Data - Patch 1



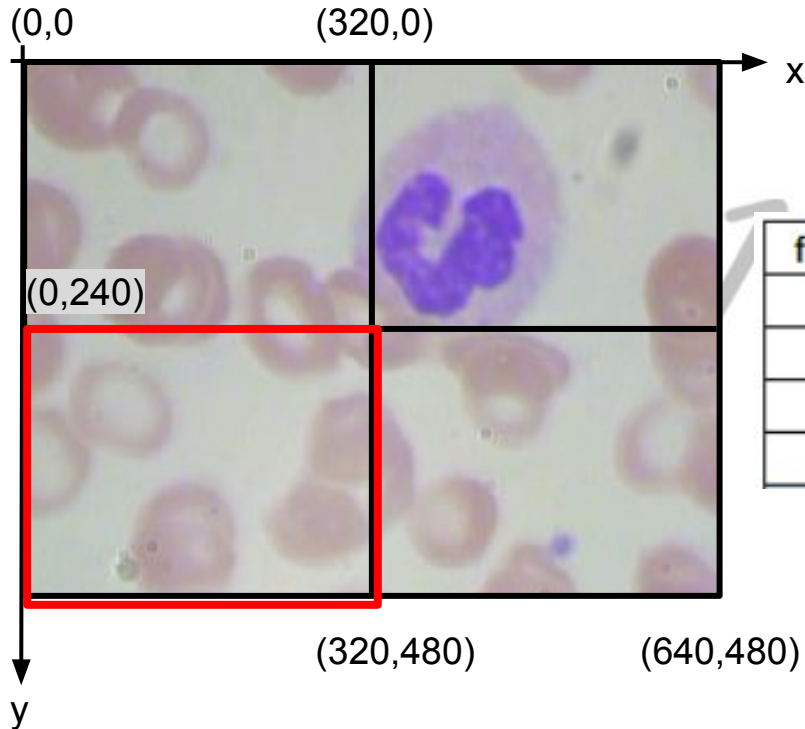
filename	patch	xmin	xmax	ymin	ymax	WBC (1/0)
1.jpg	1	0	320	0	240	0
1.jpg	2	320	640	0	240	1
1.jpg	3	0	320	240	480	0
1.jpg	4	320	640	240	480	0

# Prepare Train Data - Patch 2



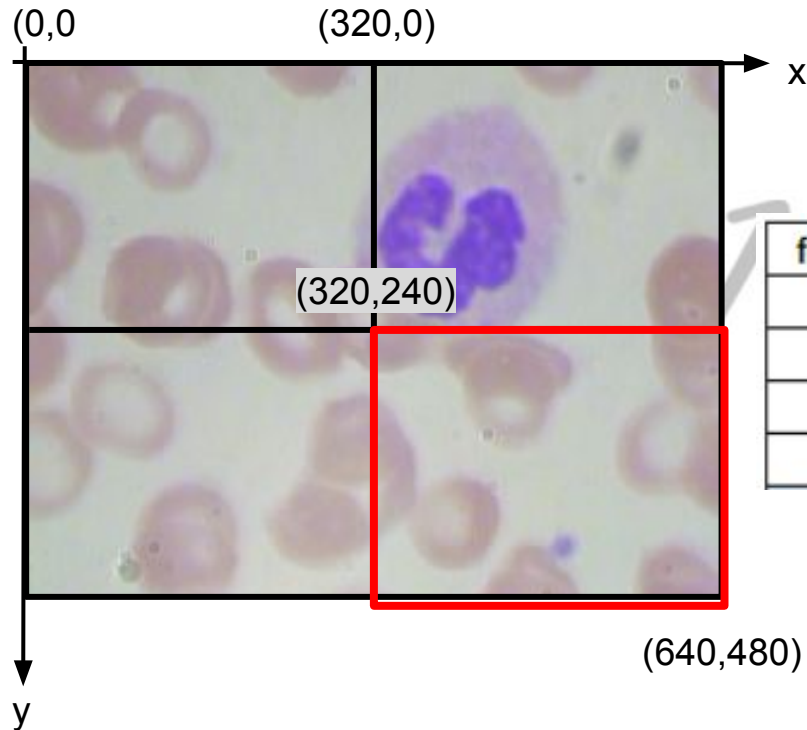
filename	patch	xmin	xmax	ymin	ymax	WBC (1/0)
1.jpg	1	0	320	0	240	0
1.jpg	2	320	640	0	240	1
1.jpg	3	0	320	240	480	0
1.jpg	4	320	640	240	480	0

# Prepare Train Data - Patch 3



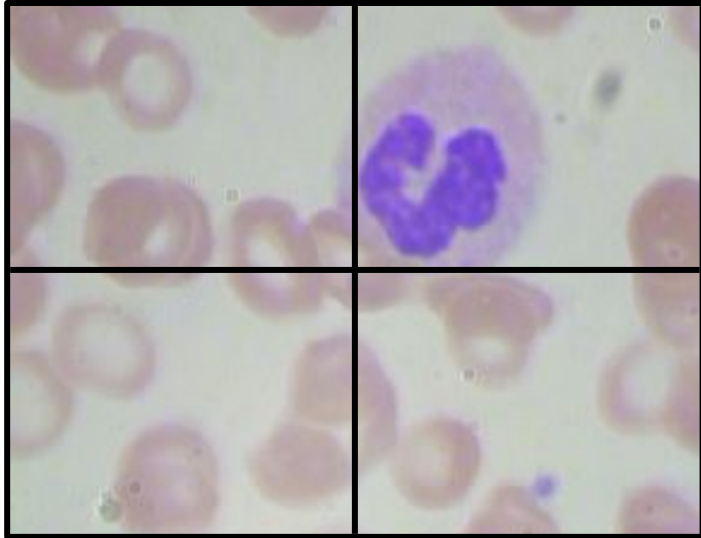
filename	patch	xmin	xmax	ymin	ymax	WBC (1/0)
1.jpg	1	0	320	0	240	0
1.jpg	2	320	640	0	240	1
1.jpg	3	0	320	240	480	0
1.jpg	4	320	640	240	480	0

# Prepare Train Data - Patch 4



filename	patch	xmin	xmax	ymin	ymax	WBC (1/0)
1.jpg	1	0	320	0	240	0
1.jpg	2	320	640	0	240	1
1.jpg	3	0	320	240	480	0
1.jpg	4	320	640	240	480	0

# Prepare Train Data for Naive Approach



filename	patch	xmin	xmax	ymin	ymax	WBC (1/0)
1.jpg	1	0	320	0	240	0
1.jpg	2	320	640	0	240	1
1.jpg	3	0	320	240	480	0
1.jpg	4	320	640	240	480	0

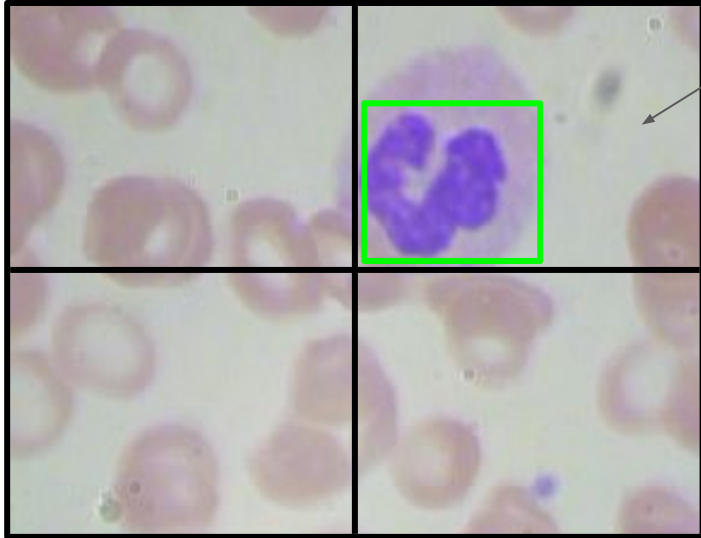




Thank You

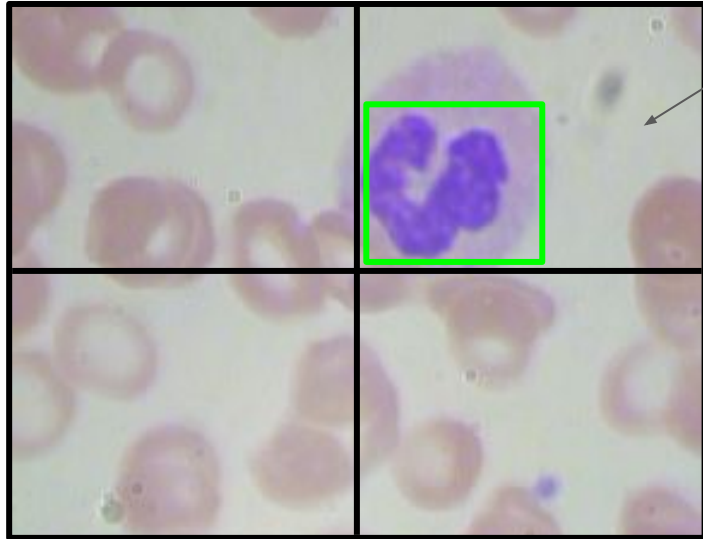
# Calculating IoU

IOU > 0.5



filename	patch	xmin	xmax	ymin	ymax	WBC (1/0)
1.jpg	1	0	320	0	240	0
1.jpg	2	320	640	0	240	1
1.jpg	3	0	320	240	480	0
1.jpg	4	320	640	240	480	0

# Prepare Train Data for Naive Approach



IOU > 0.5

filename	patch	xmin	xmax	ymin	ymax	WBC (1/0)
1.jpg	1	0	320	0	240	0
1.jpg	2	320	640	0	240	1
1.jpg	3	0	320	240	480	0
1.jpg	4	320	640	240	480	0

# Implementing Naive Approach