Approach 1 - Simple methods for Image Segmentation

Rethinking Image Segmentation Problem

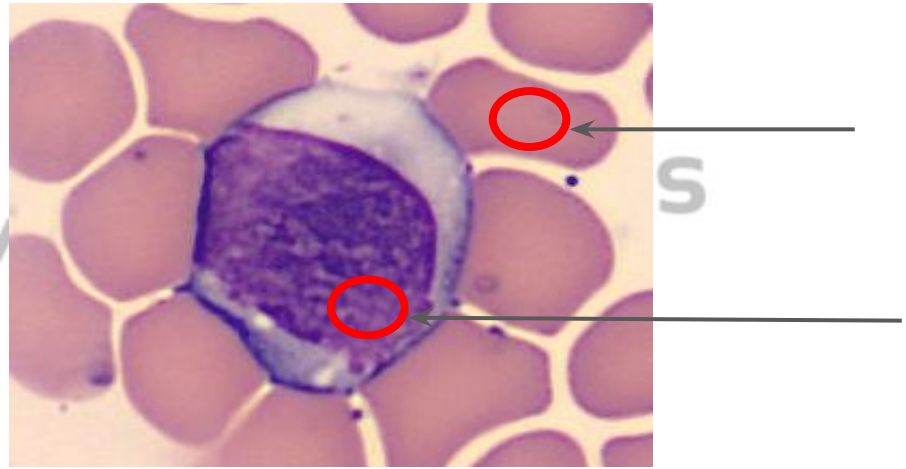

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Image Segmentation through Clustering

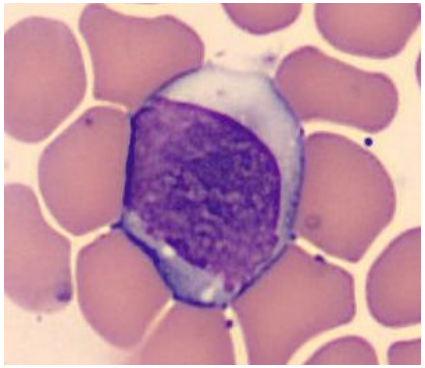


Image Segmentation through Clustering

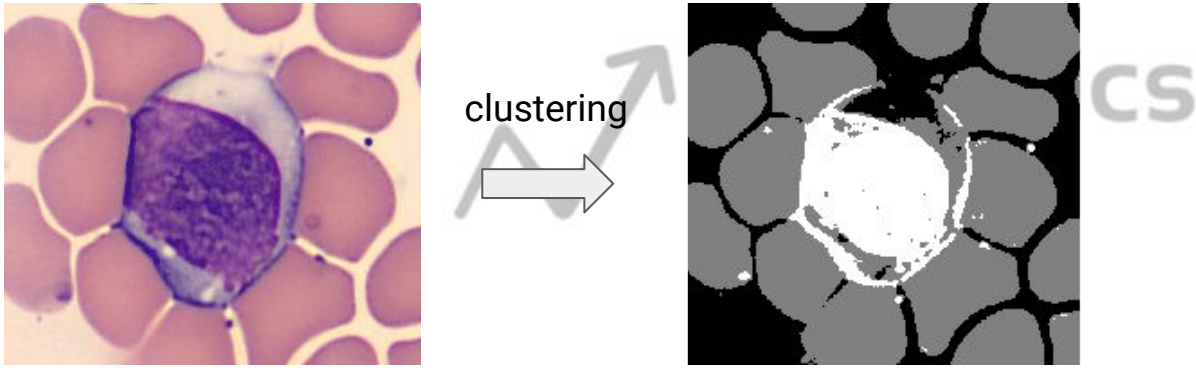
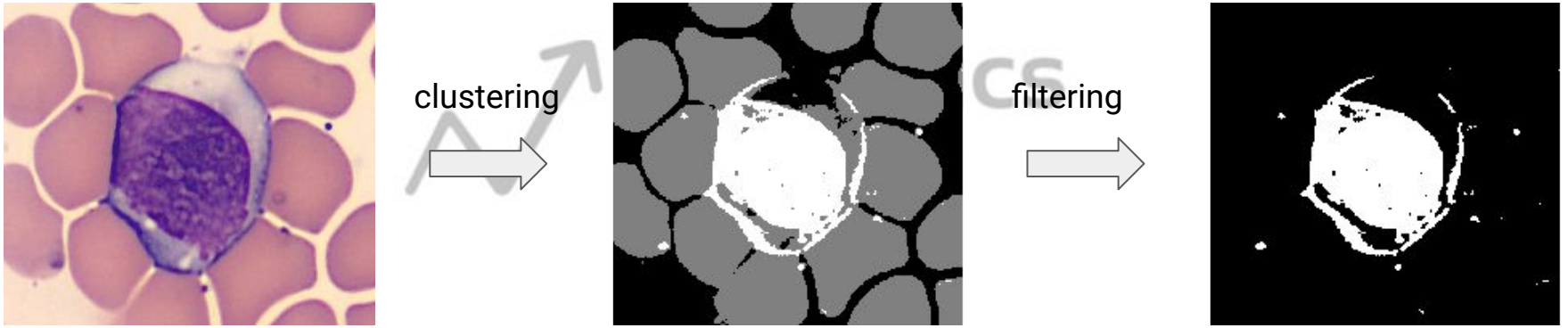


Image Segmentation through Clustering



Steps for Image Segmentation through Clustering

1. Data Loading and Preprocessing

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1.1 Load the Data

Steps for Image Segmentation through Clustering

1. Data Loading and Preprocessing

1.1 Load the Data

1.2 Data Exploration

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1.3 Data Cleaning

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2.1 Apply k-means clustering on the image

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2.1 Apply k-means clustering on the image

2.2 Filter the appropriate category

Steps for Image Segmentation through Clustering

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2. Image Segmentation through Clustering

2.1 Apply k-means clustering on the image

2.2 Filter the appropriate category

2.3 Calculate IoU score

Code Walkthrough of Clustering

Image Segmentation through Clustering

Pros:

- Simple Approach

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Image Segmentation through Clustering

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- Performs better than thresholding

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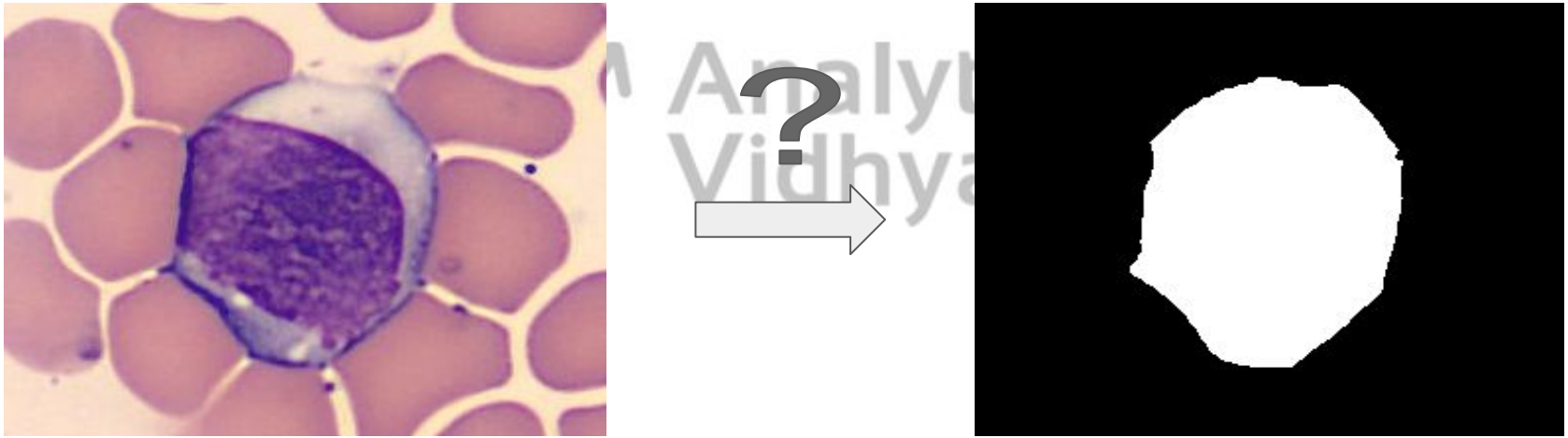
Pros:

- Simple Approach
- Performs better than thresholding
- Can be applied for multiple images

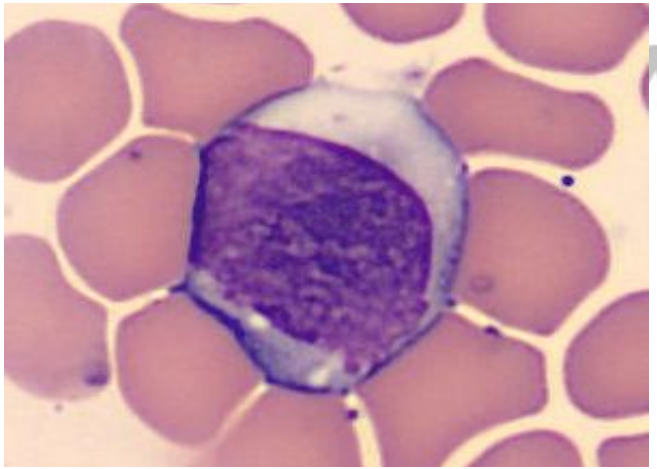
Cons:

- Manual filtering for appropriate cluster
- Different categories can have same color
- Doesn't adjust well for large datasets

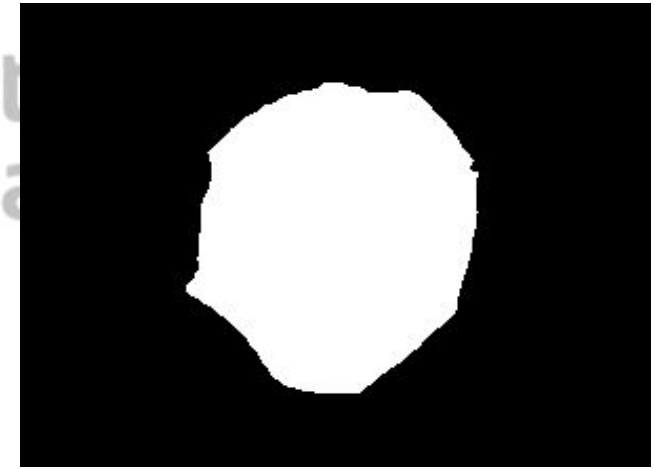
Better Approach to solve Blood Cell Segmentation?



Better Approach to solve Blood Cell Segmentation?



Deep Learning



Thank you