



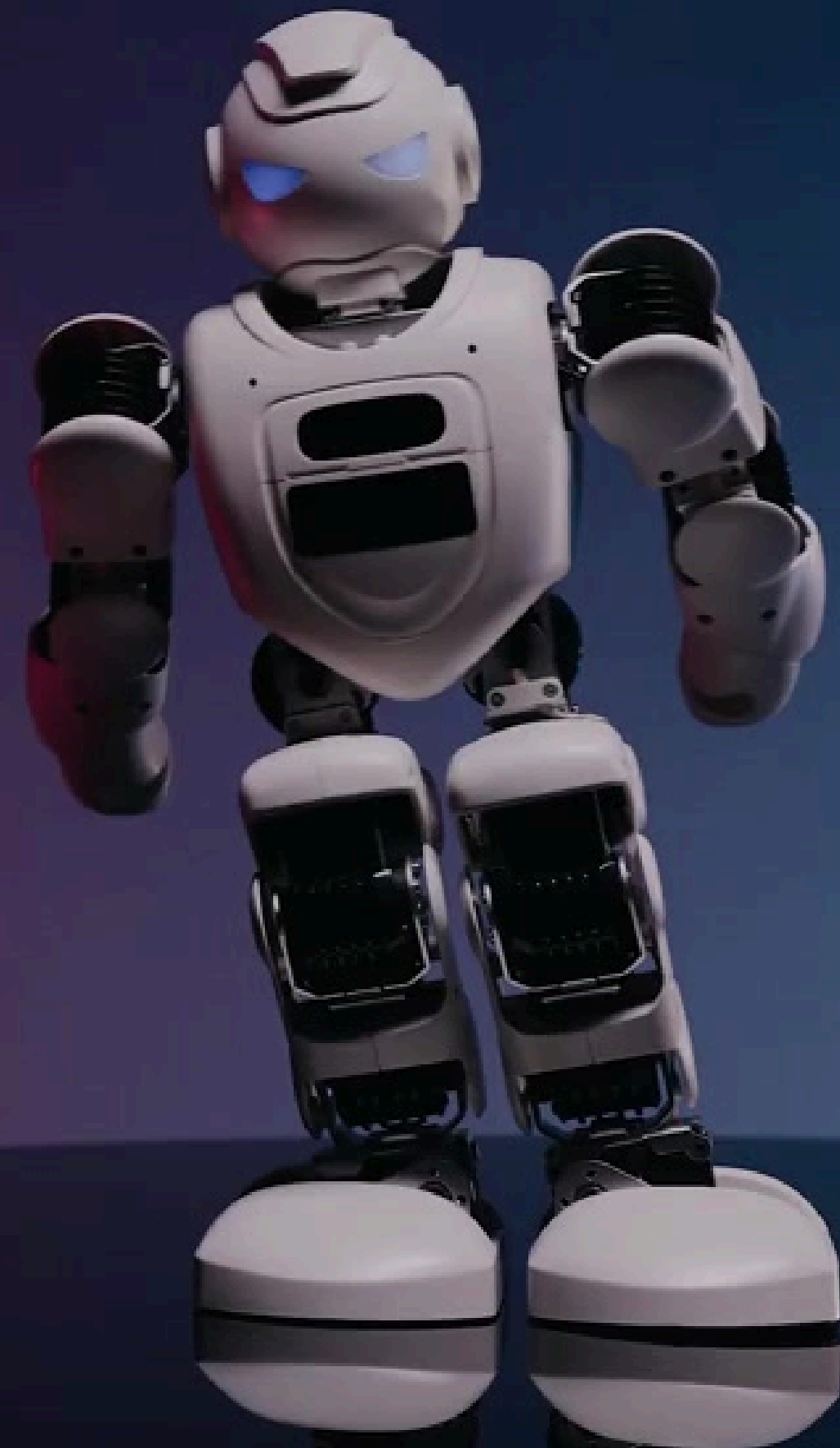
WEEK 3

DEEP LEARNING FOR COMPUTER VISION



UNLIMITED

Presented by **Asst. Prof. Dr. Tuchsanaï Ploysuwan**



Morphological Operations in OpenCV

1. Erosion

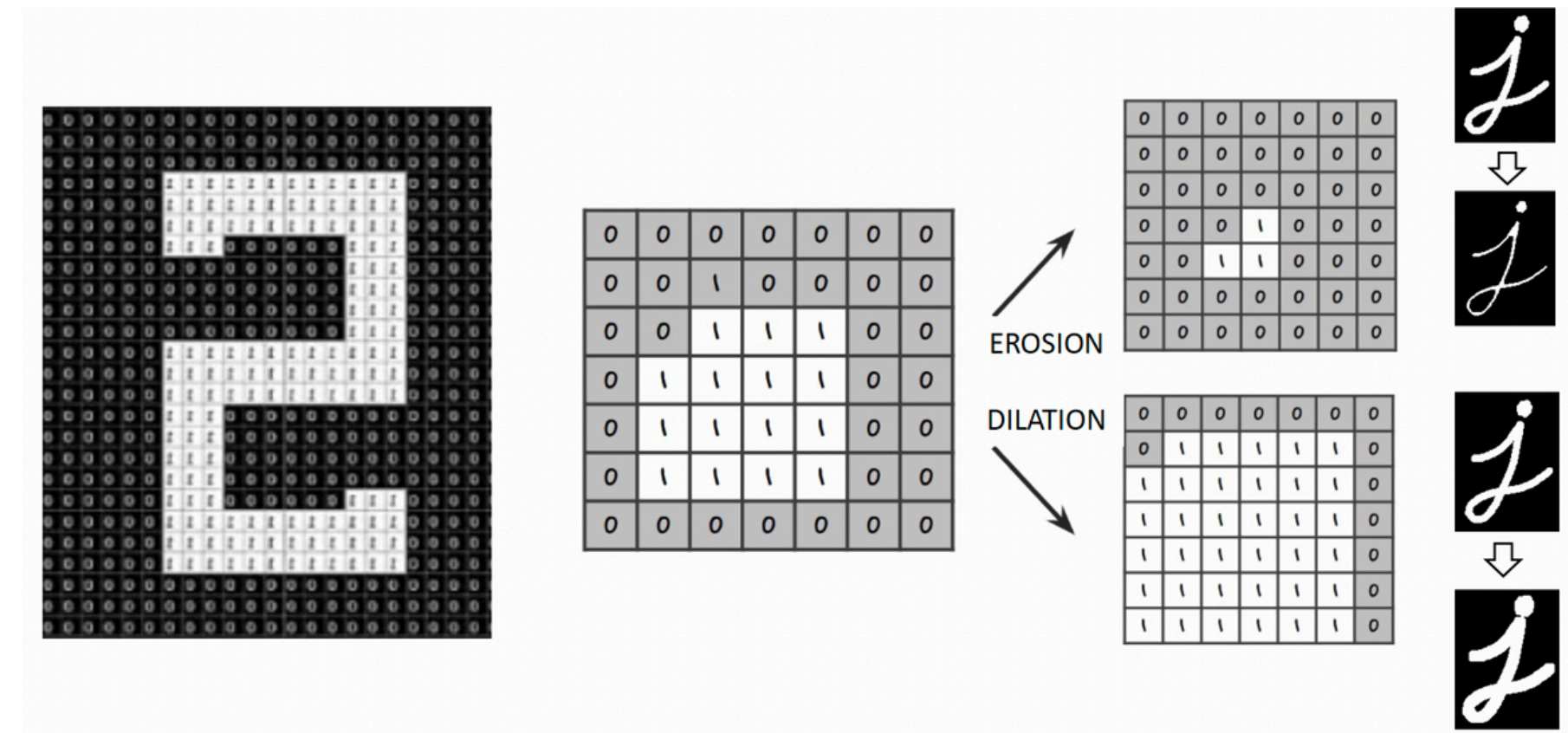
Definition. : Removes pixels at the boundaries of objects in an image.

Applications: Used to remove small noise, separate connected objects, and refine boundaries.

2. Dilation

Definition : Adds pixels to the boundaries of objects in an image.

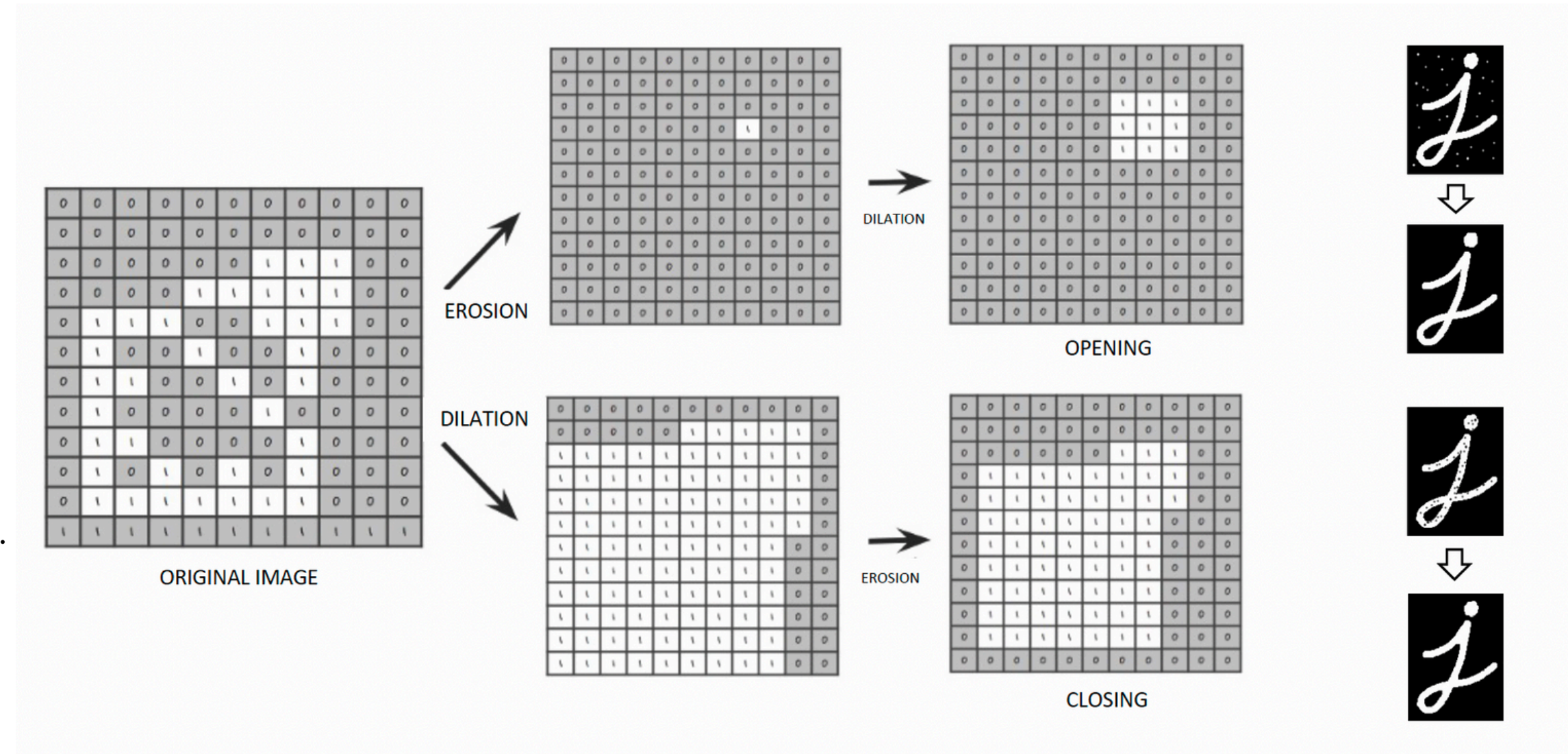
Applications: Useful for increasing object size, reducing noise, and filling small gaps.



Morphological Operations in OpenCV

3. Opening

- Process: Erosion followed by dilation.
- Effect: Removes small objects (noise) from the foreground while keeping the shape and size of larger objects intact.
- Applications: Useful for cleaning up noise in binary images.



4. Closing

- Process: Dilation followed by erosion.
- Effect: Fills small holes and gaps within the objects while maintaining the outer boundary.
- Applications: Often used to close small holes or gaps in the foreground objects.

