

The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. A large, dark olive-green speech bubble is centered on the page, containing the main text.

MUHAMMAD & HELMY

CONVOLUTIONAL NEURAL NETWORK (CNN)

EPISODE 6



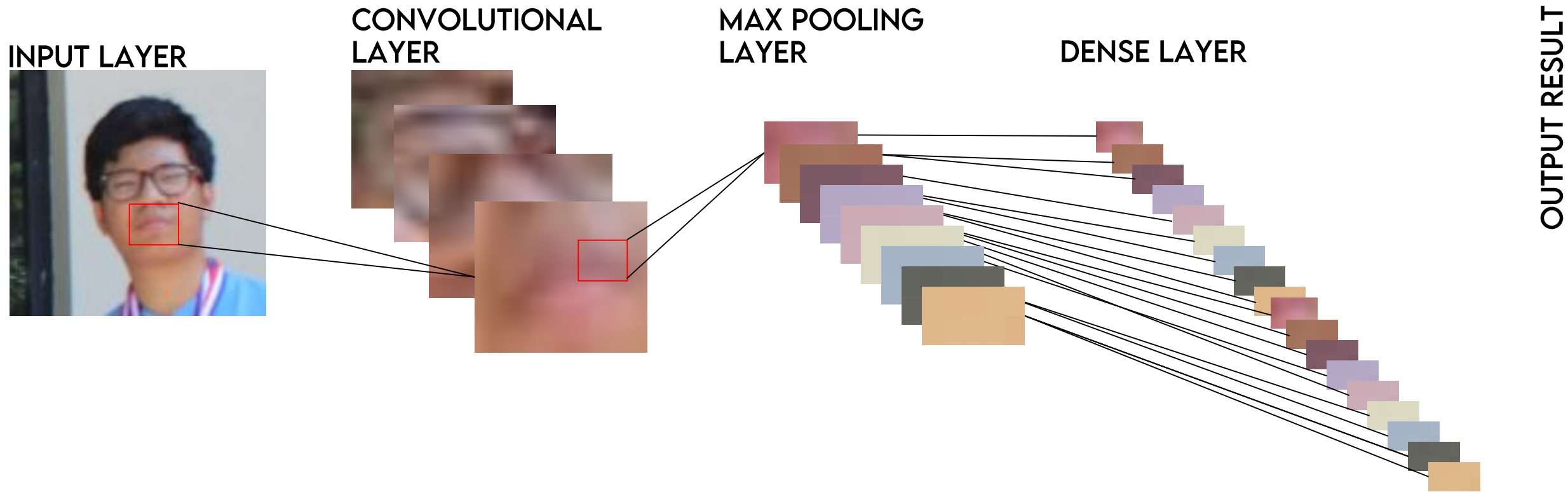
CNN

**TYPE OF ARTIFICIAL
NEURAL NETWORK USED
PRIMARILY FOR IMAGE
RECOGNITION AND
PROCESSING, DUE TO ITS
ABILITY TO RECOGNIZE
PATTERNS IN IMAGES**

- VERY IMPORTANT?

CNNs ARE PARTICULARLY USEFUL FOR FINDING PATTERNS IN IMAGES TO RECOGNIZE OBJECTS, CLASSES, AND CATEGORIES. THEY CAN ALSO BE QUITE EFFECTIVE FOR CLASSIFYING AUDIO, TIME-SERIES, AND SIGNAL DATA.

HOW IT WORK? CONVOLUTIONAL NEURAL NETWORK CONSISTS OF MULTIPLE LAYERS LIKE THE INPUT LAYER, CONVOLUTIONAL LAYER, POOLING LAYER, AND FULLY CONNECTED LAYERS.



HIGH LEVEL FEATURES



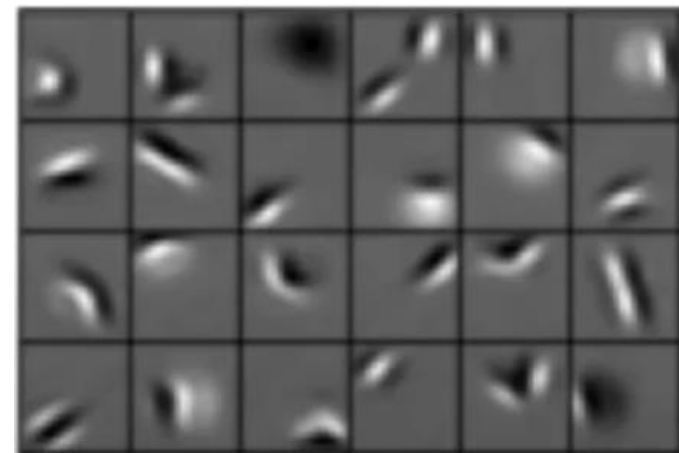
FACIAL STRUCTURE

MID LEVEL FEATURES



EYES, EARS, NOSE, MOUTH

LOW LEVEL FEATURES



EDGE, DARK SPOTS