

IMAGE DETECTION WITH YOLO AI ON A RASPBERRY PI FOR THE SUMMER SCHOOL 2025

TWO PROJECTS, ONE GOAL:

ARTIFICIAL INTELLIGENCE MADE TANGIBLE - CREATED BY STUDENTS,
MADE FOR STUDENTS.



TECHNOLOGY OVERVIEW:

- CURRENT YOLO MODELS (YOU ONLY LOOK ONCE): REAL-TIME OBJECT RECOGNITION
- RASPBERRY PI 4/5: COST-EFFECTIVE, ENERGY-EFFICIENT PLATFORM
- PYTHON + OPENCV TO CONTROL THE CAMERA & IMAGE PROCESSING

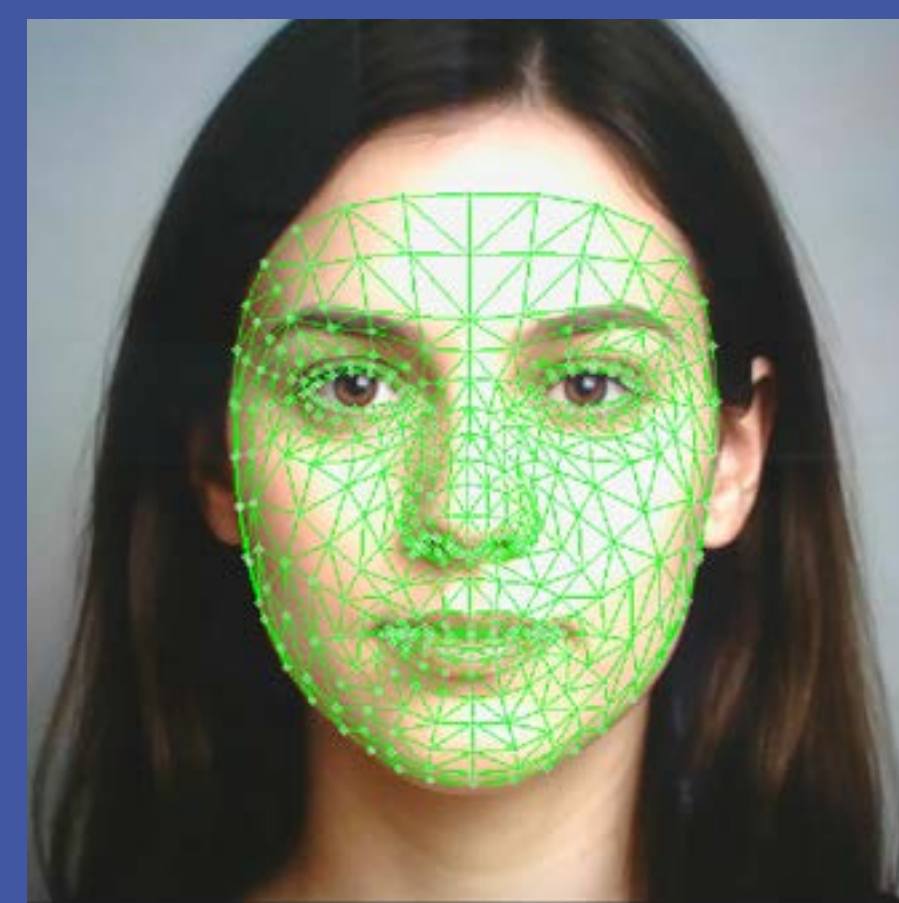
LICENSE PLATE RECOGNITION

HOW AI MODELS RECOGNIZE LICENSE PLATES
DESPITE HARDWARE LIMITATIONS -
AT WHAT POINT DO THEY REACH THEIR LIMITS?



FACE RECOGNITION

INSIGHT INTO HOW MODERN AI MODELS WORK -
HOW YOLO AND MEDIAPIPE ANALYZE
AND DISTINGUISH FACES.



TAKE PART IN THE SUMMER SCHOOL OR GET STARTED YOURSELF:
VISIT OUR GITHUB REPOSITORY!



TEAM-ORIENTED PROJECT 2025

CHANTAL DEUSCH | JEREMY DIEM | JAN GASCHLER | SERHAT GÜREL | PAULINA PYCZOT | VALENTIN TALMON-L'ARMÉE