



SMART GRIPPER

Team Engibeers

Vasileios Banakos, Violeta Megari, Charalampos Papadopoulos

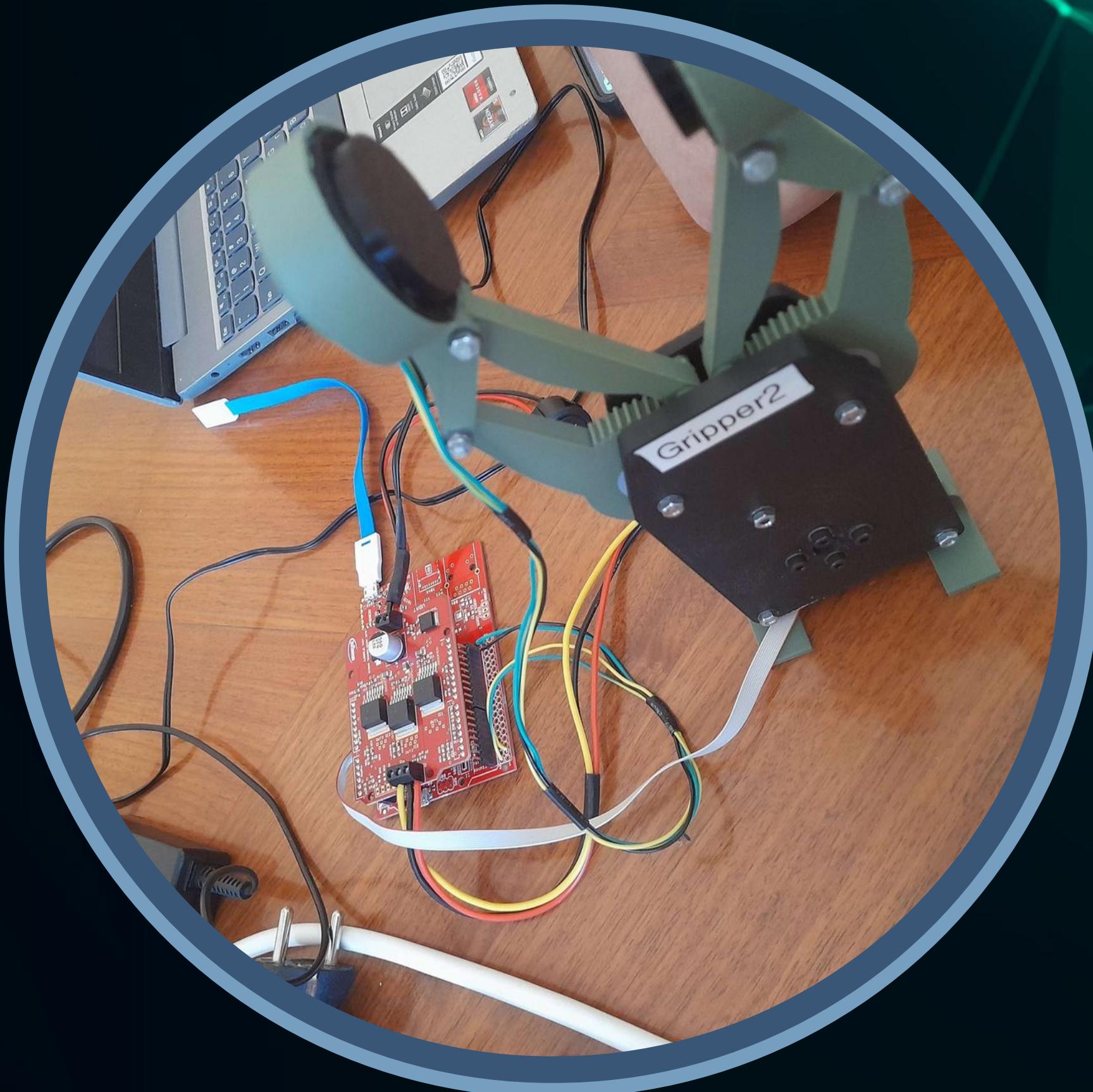


OUR IDEA

A smart gripper with object
recognition
capable of automatically adjusting the
force of its grasp based on the
hardness
or softness of the object

SYSTEM OPERATION

- Magnetic sensor data reading
- PID & FOC
- Smart sensing & adjusting



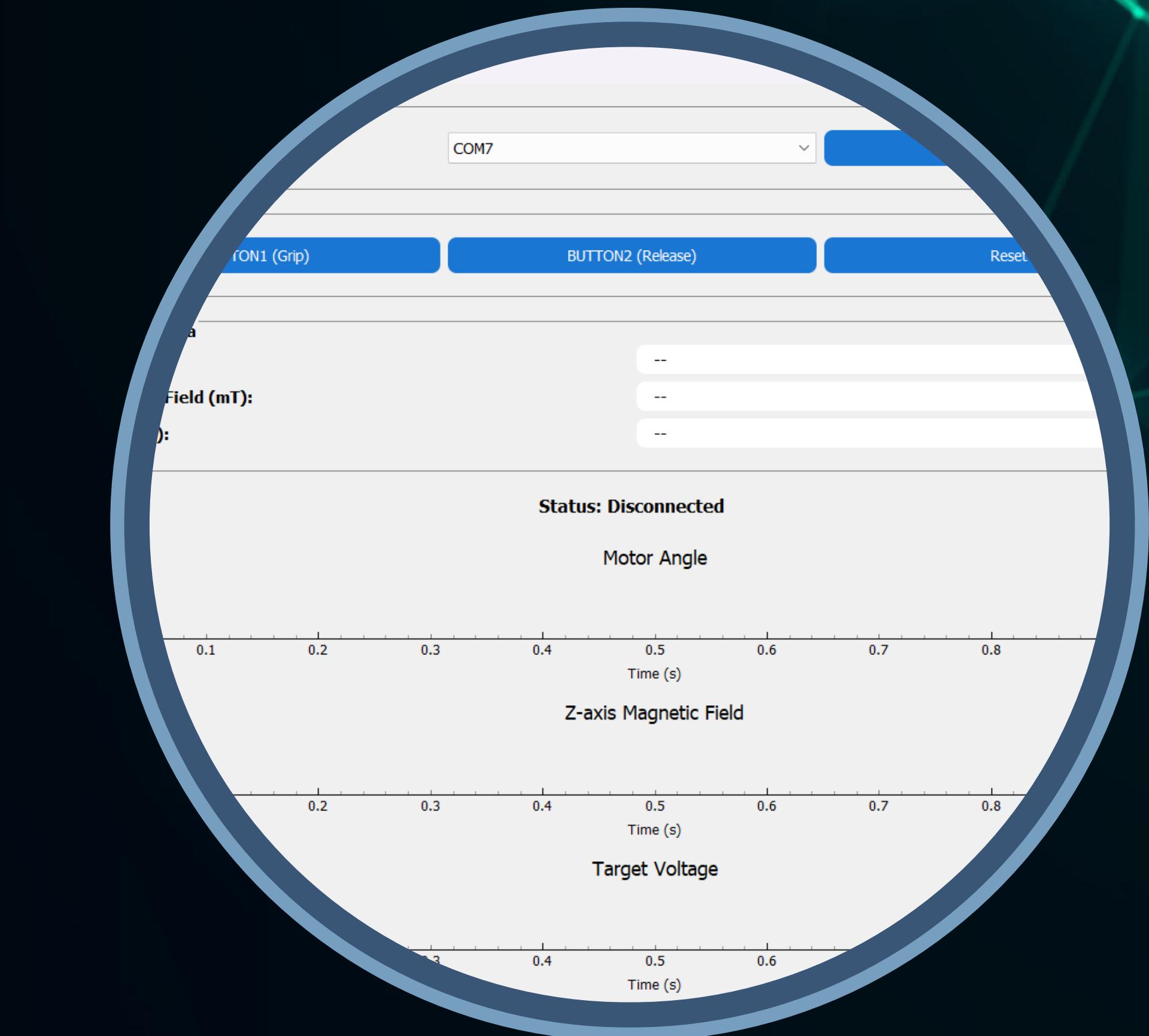


OBJECT RECOGNITION

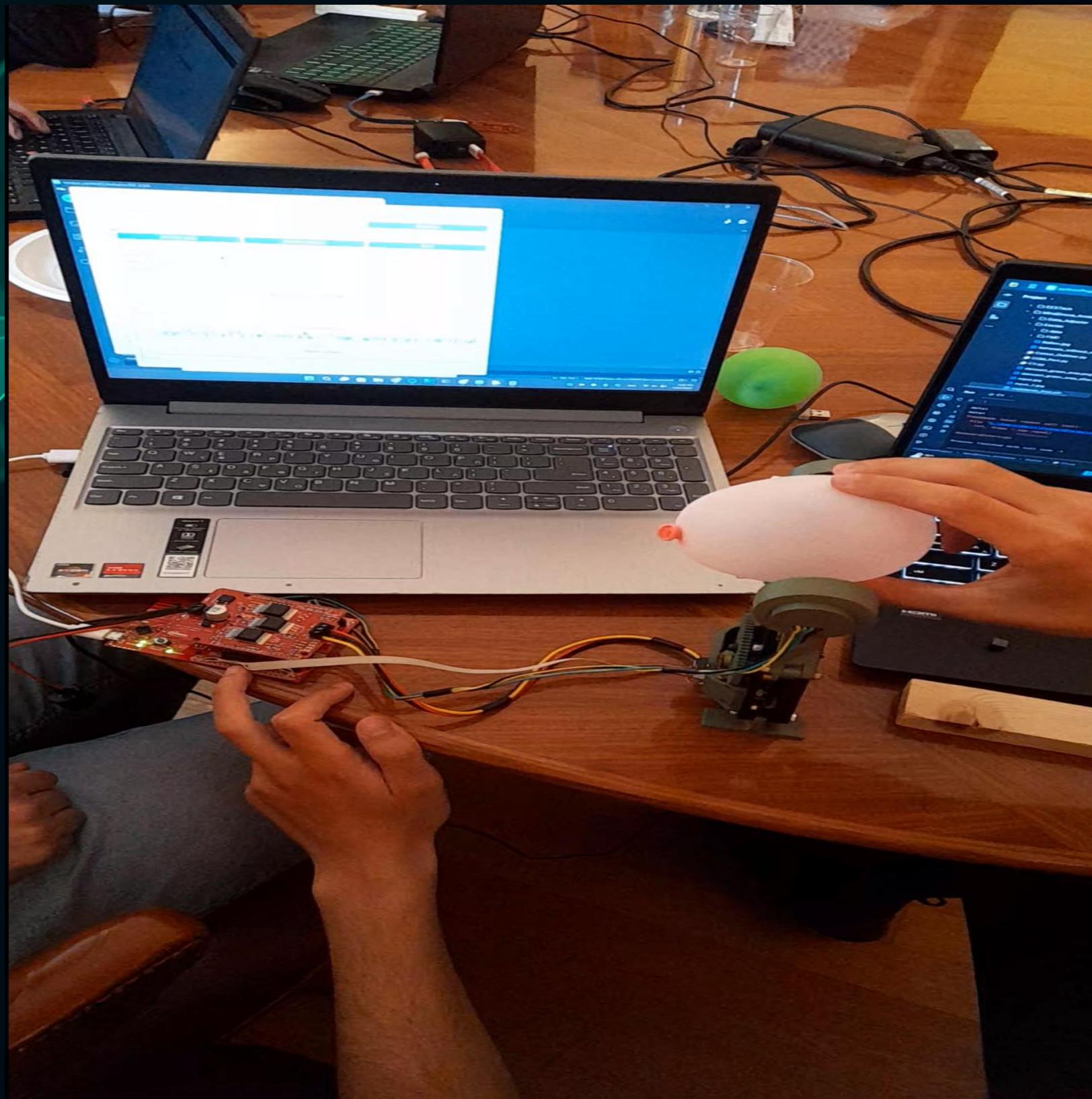
- Custom trained neural network model
- Recognises metal, plastic & wood
- Determines the grip force to be applied

USER INTERFACE

- PyQt GUI
- Controlling with buttons
- Real-time plotting of the system's parameters



VIDEO OF THE SYSTEM'S OPERATION





THANK YOU FOR YOUR ATTENTION

**and come to Greece for
(engi)beers**