Current project

- Aerial vision for ground troops using consumer hardware
  - DJI Mavic Air 2s - $700
  - DJI Mavic Advanced Industrial - *portable aerial thermo imaging solution* $6000
  - MS Hololens 2 mounted on the helmet - *could be replaced by smartphone client in majority of situation* $3000

Roadmap

1. Oracle
    - **A. iPhone Ground Station app**
        - *I. connects to DJI remote over DJI SDK*
        - *II. Connects to system's server*
        - *III. Broadcasts repacked video from drone via 4G connection*
        - *IV. Pilots drone according to the instruction from the server*
    - **B. iPhone/Hololens 2 Fighter app and a webpage**
        - *I. Displays received from broadcast Video from camera of drone*
        - *II. Displays GPS coordinates of Drone and of the Fighter*
    - **C. System's server**
        - *I. Supporting multiple concurrent connections of the iPhone Ground Station apps*
        - *II. Efficiently and scalable records multiple drone camera streams*
    - D. Hololens/Helmet mount 3d print
2. Raven
    - A. iPhone Ground Station app
    - B. iPhone/Hololens 2 Fighter app
        - *I. Shows GPS markers of recognized targets received from the System's server*
    - C. System's server
        - *I. CV/DeepML (trained YOLO model) for recognition of humans, vehicles in aerial footage*
        - *II. Tracking of targets*
3. Tempest
    1. On-board 4G/Starlink connectivity for DJI Mavic
    2. Custom firmware for DJI Mavic
    3. System's Server on Matrice 300 RTK
        1. *Direct control of DJI Mavic's*