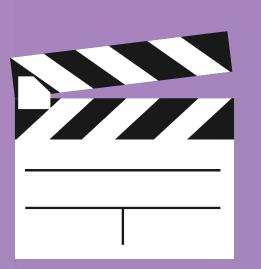


Sergeant Jack wants to track planes in his video



Video with tracked object is given to the Sergant



Perception Engine processes video

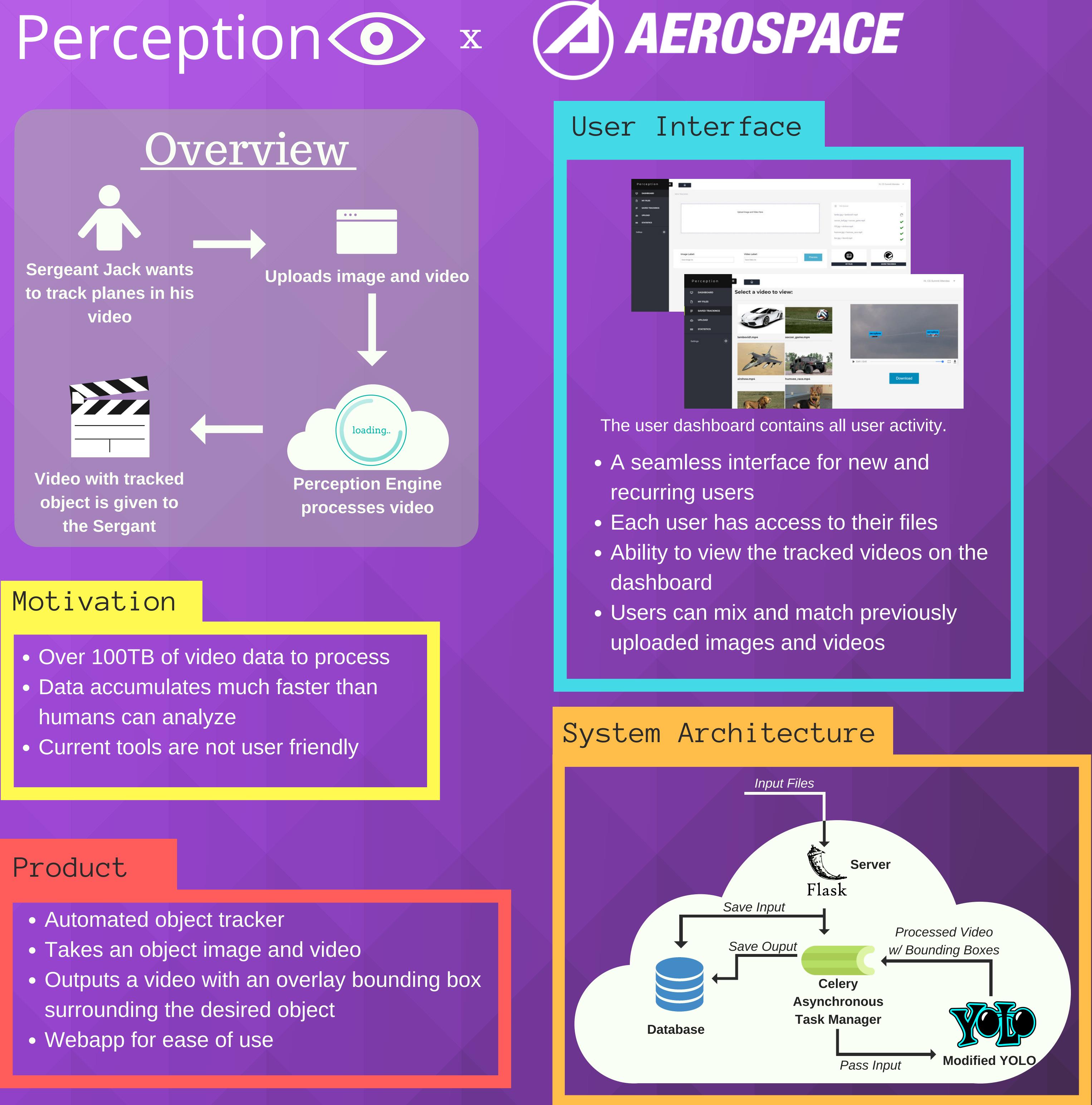
Motivation

- Over 100TB of video data to process
- Data accumulates much faster than humans can analyze
- Current tools are not user friendly

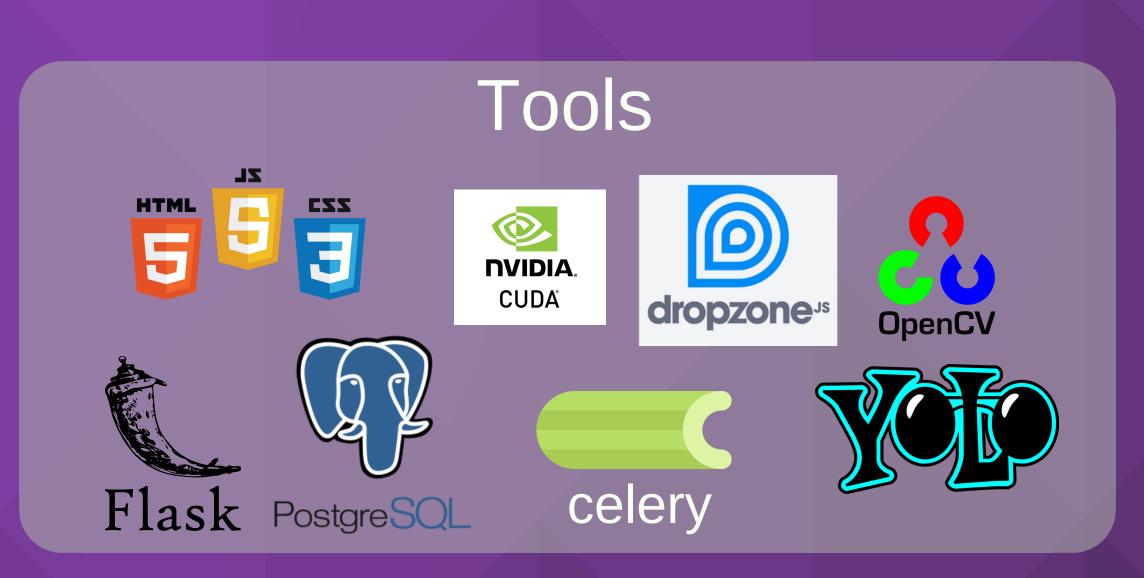
Product

- Automated object tracker
- Takes an object image and video
- Outputs a video with an overlay bounding box surrounding the desired object
- Webapp for ease of use

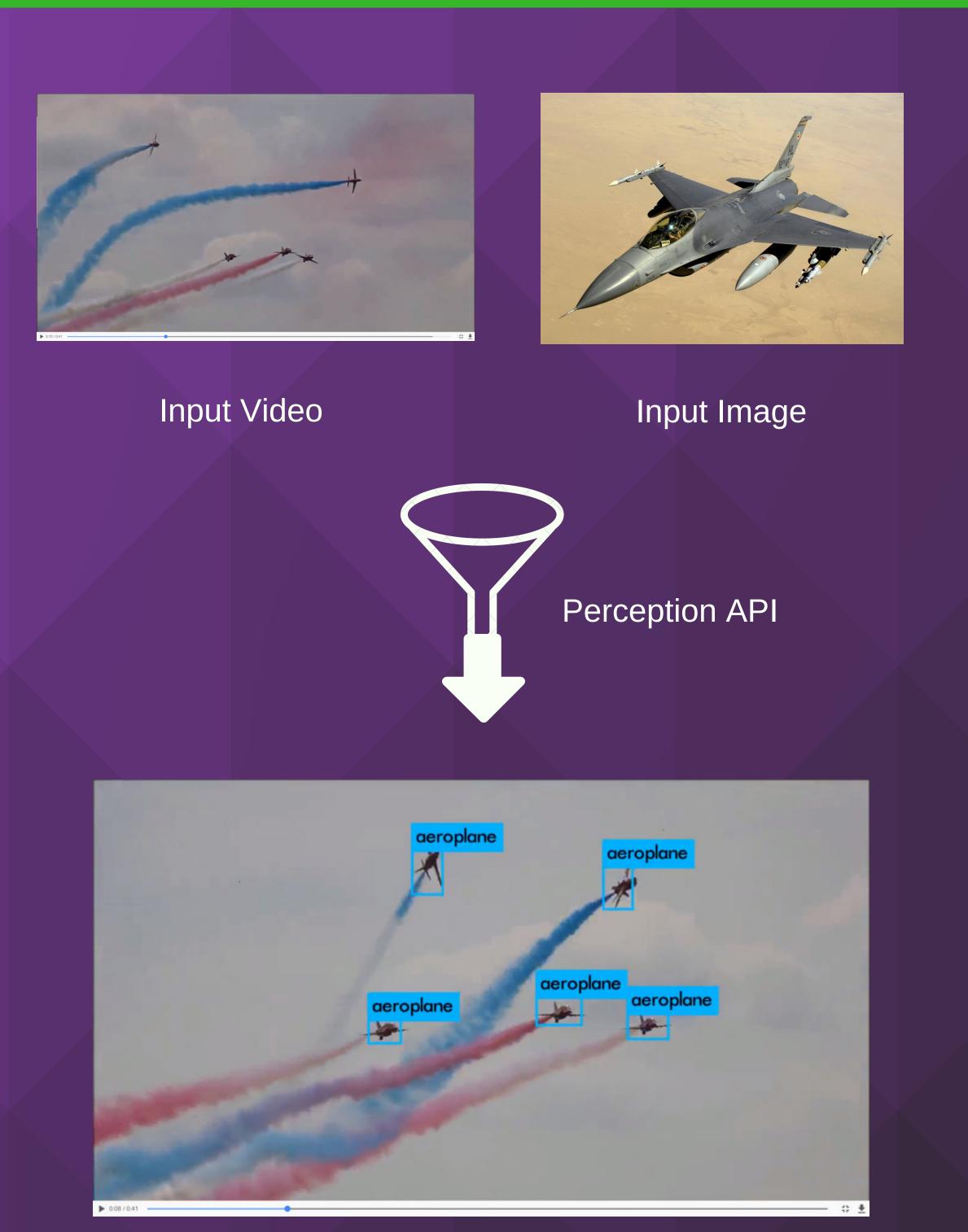
Bhattacharya A. (Lead), Patient B., Vaid D., Can J., Srimat S.

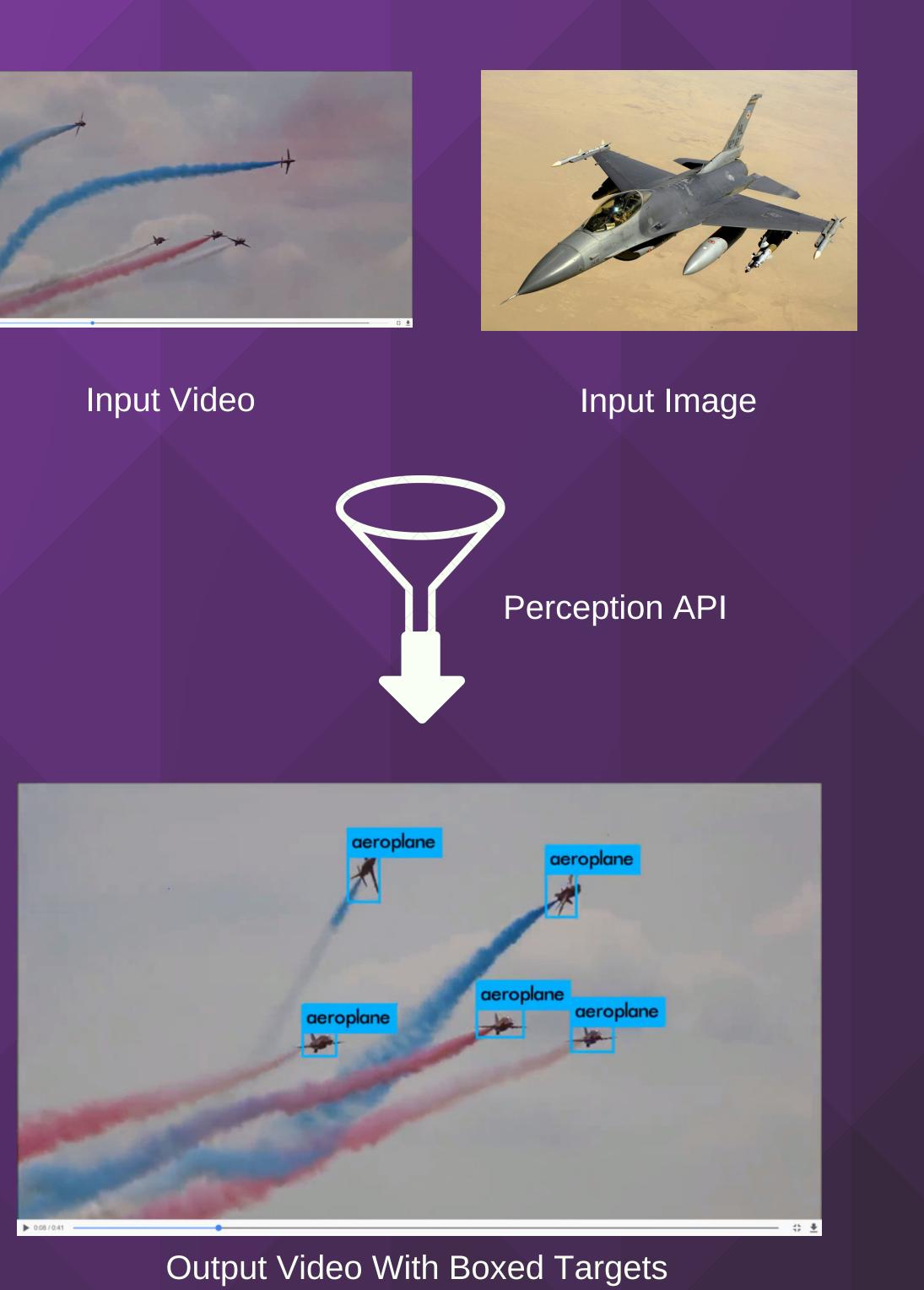






Engine





Our perception engine is based off of YOLO (You Only Look Once). YOLO is a neural network based object tracker. We modified YOLO to filter its output to a single type of object, reducing clutter on the screen and emphasizing our desired object.

Special Thanks To:

Professors - Kruegel C., Krintz C. Mentors - Fitzgerald R., Scrofano R.