ALEGION

Drone Footage Roof Damage Assessment

Global insurance company assesses roof and structural damage in drone footage

- **Bounding boxes, key points, polygons, splines**
- Semantic segmentation
- Video annotation
- Large taxonomy application

- ML-assisted pre-labeling: object detection & classification
- Facial landmark detection
- Entity relationships & ID tracking
- **Image analysis & assessment**

Increased accuracy and efficiencies

Project: A global insurance company came to us with unique annotation requirements—assessing roof and structural damage in drone footage.

Challenge:
- The annotators were required to become experts on roof construction in order to complete the tasks
- We needed to determine an accurate way to capture fallen trees

Solution: Alegion built a robust training curriculum including a multitude of damage class examples in order to develop annotator expertise in identifying the intricate anatomy of the roofing construction and materials. We modified our tooling to increase the level of zoom on the images and built specifications around how polygons needed to be employed to capture elements of a fallen tree. We identified when parts of a tree could simply be "bagged" to increase throughput and maintain quality.